



UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE & ENGINEERING



The Centralized Process for Student Initiative Funding



2018 - 2019 Impact Report



Introduction

Diverse co-curricular opportunities are offered to engineering students to enhance their university experiences. Students can participate in a variety of clubs including design, sports and recreation, cultural, arts and performance, professional development, departmental/disciplinary, and humanitarian. This report highlights the student clubs' accomplishments for the 2018 – 2019.

The Centralized Process for Student Initiative Funding (CPSIF) reviewed and approved funds for 87 student clubs for the 2018 – 2019 year for a total of \$368,669.36. The breakdown can be shown in the table below:

Initiative	Approved Amount
MSE	\$11300
MIE	\$80973
ChemEng	\$18200
Civ & Min	\$16500
EngSci	\$25000
ECE	\$52190.12
EAA	\$100900
IBBME	\$18406.24
YNCN	\$12820
Total Approved Amount	\$368,669.36

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2018 World Mining Competition – U of T Team



Total Funding Awarded	\$1,300.00
Civ & Min	\$1,000.00
EAA	\$300.00

The University of Toronto World Mining Competition team was awarded \$1,000 from the Civil and Mineral Engineering Department, and \$300 from the Engineering Alumni Association.

The funds were used on the following:

- Registration Fee
- Flight tickets to Saskatoon
- Logistic expenses incurred in Saskatoon

The World Mining Competition is Canada's first global undergraduate mining strategy case competition. The competition provides students from commerce, engineering, mining and geology backgrounds the opportunity to enhance understanding of the global mining industry through experiential learning. Hosted by the University of Saskatchewan, the competition celebrates the innovation that occurs when a diverse team works together on a problem to create the most robust solution. Not only does the competition provide an outstanding learning experience, but it also gives students

networking opportunities with each other and industry professionals.

This year, the World Mining Competition was based on a fictitious iron ore project located in northeastern Angola. Competitors had to analyze the feasibility of this project, which had some technical issues regarding the overall pit angle, safety concerns, and high geopolitical risk. Our presentation placed an important focus to the financial concerns, because the company was going to default its debts by year-end, so we conducted a thorough analysis of the company's financial position. This approach was not of the liking of all the judges, they were expecting a more general, high level analysis, of all the different aspects regarding the operation. However, we still believe that in "real-life" our approach would be the correct one. This was corroborated by one of the judges, Resources and Economic Geologist, Louis Fourie, owner and principal of Terra Modeling Services. For the future, we'll pass over these learnings to future U of T's competitors.

In the second night of the competition, Dalton Veintimilla and Devlen Malone won the Trivia Night event, which had a weighting on the results. U of T finished sixth among fifteen delegations in total. It's important to note that two of the attendees, Jihad Raya and Devlen Malone are willing and eager to come back, both 3 years-students that will be completing their final year in 2019-2020.



U of T Preliminary Presentation



U of T Team at the Award Gala

**American Society of Heating, Refrigeration,
and Air-Conditioning Engineers (ASHRAE) –
U of T Branch**



Total Funding Awarded	\$1,950.00
Civ & Min	\$ 500.00
EngSci	\$ 100.00
EAA	\$ 500.00
EngSoc	\$ 350.00
YNCN	\$ 250.00

For the 2018-2019 year, the UofT Student Branch of ASHRAE was awarded \$1950. This funding was used to provide educational and networking events for University of Toronto engineering students interested in buildings, sustainability, and HVAC systems. This funding was used to host a variety of different events, the highlights of which are discussed below.

Speaker Event on Sustainability in Small Town Communities

The chair of the Cobourg, ON Sustainability Committee joined us at UofT to talk about the unique challenges, opportunities and strategies for improving the sustainability of small town communities. Funding was used to pay for AV access fees, food for attendees and a nominal gift for the speaker.

Rorschach Brewery Tour

One of the founders, and University of Toronto Chemical Engineering alumnus, led a tour of the

brewing facility for 15 of our members. This tour helped educate our members on some unique real-life HVAC, chemical engineering, and mechanical systems applications. We learnt about brewery factors that impact taste, facility energy use, and even zoning issues within the City of Toronto. This experience will help students consider different opportunities to apply their engineering education outside of the more traditional industries. Funding was used to pay the fee for the facility tour.

Canadian Green Building Council Emerging Green Professionals Collaboration Panel Event: Skills Gap in the Zero Carbon Workforce

ASHRAE UofT was able to extend it's reach by collaborating with the Canadian Green Building Council's (CaGBC) Emerging Green Professionals team to host a panel discussion between 5 sustainable buildings professionals at the university. The event was well attended and gave students to opportunity to learn about where they might apply the skills they learn in their engineering course work to help grow the industry.

ASHRAE Career Fair

In partnership with the ASHRAE Toronto Chapter, the five university/college ASHRAE clubs help to organize and host an HVAC and sustainable buildings career fair every year. While this years event was hosted at Humber College and not UofT, it was well attended by our membership and helped students to connect with companies looking for interns and new grads.

ASHRAE UofT Building Science Networking

Night

In collaboration with the Building Science Nights group, ASHRAE co-hosted a networking night which brought together University of Toronto Engineering Students with professionals from across the profession, including several UofT alumni! This opportunity allowed students to connect with and be mentored by professionals in different lines of buildings related work in a casual environment and to build their network within the industry. The event also included a short talk on mold in buildings by University of Toronto alumnus Claire Lepine. Funding was used to pay for some small snacks and finger food to help break the ice and raise event attendance.

As you can see from the sample of events listed above, this CPSIF funding has helped ASHRAE UofT to provide more opportunities for students to learn about HVAC systems and applications, mechanical engineering and buildings in general as well as to help students expand their professional network. Without this funding, some events (e.g. facility tours) would be nearly impossible to provide for free to students and other events would be significantly less impactful (e.g. speaker and networking events). CPSIF funding was received from the Mechanical and Industrial and Civil and Mechanical Engineering departments, the Division of Engineering Science, YNCN, EngSoc, and the Engineering Alumni Association. We would like to thank all of these organizations for their funding of our club – we couldn't do it without you. Several alumni of the University of Toronto were engaged through our events. These include:

- Matthew Reiner, University of Toronto

Chemical Engineering alumnus

- Matthew is a co-founder of Rorschach Brewing Co. and led a tour of the facility for the club on February 12, 2019.
- Claire Lepine, University of Toronto Masters of Public Health alumnus
 - Claire gave a talk about her Masters work on mold on the February 6th, 2019 co-hosted Building Science Networking Night.
- Jason Gray, University of Toronto Masters of Applied Science (Civil Engineering) alumnus, Jenn Fann, University of Toronto Engineering Science alumnus, additional alumni (personal details withheld)
 - Attendees at the February 6th, 2019 Building Science Networking Night.

Beyond the events listed above, we have several events in the works before next year – including more tours, speakers and networking events.



Claire Lepine, MPH, Building Science Analyst at RDH speaks at the February networking event

Association of Chinese Engineers (ACE)



Total Funding Awarded	\$3,225.00
MSE	\$25.00
MIE	\$200.00
Civ & Min	\$100.00
EngSci	\$100.00
ECE	\$500.00
EAA	\$750.00
EngSoc	\$1,000.00
IBBME	\$200.00
YNCN	\$350.00

ACE is dedicated to promoting Chinese culture, friendship, and communication between our members. It is also committed to helping its members succeed by delivering high-quality academic, career, and social events and services. UTACE has over 500 active members during the 2018-2019 school year, which makes it one of the largest student organizations within the University of Toronto Engineering community. The club was founded by most engineering departments with a total amount of \$3225 this year. We utilized the funding for purchasing props, refreshments, gift cards for our guests, and room bookings in order to increase event quality.

There were three main types of events ACE held. Academic events including CDS Hackathon, LLS Hackathon, exam distress session; professional skill development events

including housing seminar, PEY seminar, summer research workshop; student-life orientated events: BBQ weekend, frosh orientation, sports event, and Chinese New Year Celebration.

For first year students, CDS and LLS are two of the major assignments of Engineering Strategies and Practices I and II. Most students struggle to write the document and benefit from extra help from CIs and professors. We hosted a whole-day hackathon, inviting four CIs from the engineering communication centre to help first year student with their CDS and LLS assignments in both semesters. ACE was the only club that organizes ESP hackathons throughout the school year. Our LLS hackathon had more than 180 students participants. Compared to last year, the number of participants has doubled for this year. Funding was used to on similar items as above. ACE held three professional skill development events during the 2018-2019 school year. In March, George Gan, an engineering alumnus (ECE OT7), was invited by ACE to hold a housing seminar. As a professional real estate agent currently, George provided students with advice and help on how to find housing resources near the campus. In the meantime, the current situation of the real estate industry was illuminated and suggestions about investments were also given. Around 30 students came to the event, and they found it useful when they were finding housing resources.

In early November, ACE held a PEY and summer research workshop. Different from the PEY Co-

op & ESIP Information Session held by Engineering Career Centre (ECC), the workshop held by ACE invited several outstanding upper year students to talk about their experiences in finding a summer intern/research, as well as Co-op for PEY. After the speeches, students were given opportunities to chat with the speakers about any questions they had. It was the first time for ACE to hold such an event in order to help engineering students with PEY Co-op, and summer intern/research findings. Funding was used to provide the speakers and attendees with food and drinks.

In the past academic year, ACE also hosted several entertaining events aiming to improve students' life by introducing Chinese culture and bringing group activities to individual students. In particular, ACE held Freshman Orientation night and Sports Competition in September, BBQ Weekend in October and Chinese New Year Party in February. It would be impossible to host these events, which provided academic support and networking opportunities to our fellow students, without the financial support we received from the Engineering society. This funding enabled us to organize a better variety of events as well as some high-quality speakers. The funding also allowed us to book rooms for our large network events so we could invite up to 100 participants. ACE appreciates all the support we received this year and look forward to serving students of Engineering Society with higher event quality in the short future.



Students working on their assignments with help of CIs



From left to right: ACE executive Steven Liu, Sean Liu explaining the sports game in Sports



Louise (Mech 1T9) talking about her experiences in doing research and finding interns

Association of Leadership in Chemical Engineering (ALChemE)



Total Funding Awarded	\$1,850.00
ChemEng	\$1,000.00
EAA	\$500.00
EngSoc	\$250.00
YNCN	\$100.00

The Association of Leadership in Chemical Engineering (ALChemE) provides a platform where students are able to develop their professional leadership competencies, which provides students with a hands-on experience by planning, organizing and executing events, and bringing new initiatives into the chemical engineering community. For the 2018-2019 term, ALChemE had received a total of \$1850 in funding. The funds received were from the Engineering Society, Engineering Alumni Association, Department of Chemical Engineering & Applied Chemistry and You're Next Career Network. The ALChemE team this year was composed completely of new members. The club was comprised of 15 consistent members who attended the majority of the weekly meetings held after school hours. All funds that were received this year were spent organizing a total of 15 events - over three times as many events as in the previous term. Additionally, attendances at these events were record-breaking, ranging up to 150 students. Alongside of the incredible and talented members who made up this year's ALChemE

team, the funding is what made these events possible. These funds and more will allow all of our members to continue to learn how to plan and budget successful events. Furthermore, it benefitted the engineering students at U of T because students were able to take away valuable information applicable to both the professional and academic world.

The funding received was used to execute events that are of benefit to the U of T engineering community. The three major events that we ran this year were Lab Tours, Ace the Interview and Research Days. Lab Tours is an event that we found U of T's first and second year students really enjoy. Students attend these events to get a taste of what kind of research professors are currently working on in the faculty. Moreover, first and second year students are able to see where they will be spending the majority of their time each week collecting, analyzing and evaluating data. At the end, this was also a networking opportunity where students are able to speak to professors' about their research. These events enable students to contact professors for summer research positions and gain a better understanding of the experience working in academia. The following picture was taken during this year's Lab Tours. The individual speaking in the image is Peter Murphy. He is the founder of ALChemE and is currently doing his Master's in air quality analysis around the GTA. The lab being presented belongs to the Southern Ontario Centre for Atmospheric Aerosol Research (SOCAAR).

Ace the Resume is an ALChemE event where students are paired with alumni, industry professionals, and professors. They present their resume and practice their interview skills for a mock job position given to them by the event organizers. Their resumes are read through by the interviewer, and a short feedback session is held for the student for future improvement. This practice allowed the students to gain experience in resume writing, network building, and interviewing. The image below was taken of a few groups who were discussing the feedback received after completing their interviews.

Research Days was our largest attending event this year with over 150 students. This year we managed to secure 10 professors who presented their work and shared information on how to get involved. The topics were diverse, ranging from carbon capture modification to biomedical advancements. Students were eager to learn more and many of them were able to secure summer research positions. The picture below was taken on one of the research days held after hours.

All in all, ALChemE promotes community inside Skule™ by providing a stepping stone for student involvement in other facets of the university. We have had numerous club members graduate from ALChemE and involve with other organizations like ChemE Car, CSChE and EAA. We also love pairing up with student organizations like CSChE, Engineering Toastmasters, and iLead to co-host events and share ideas. This club promotes community beyond the walls of Skule™ by often getting involved with local charities (ex. our annual Terry Fox Run) and U of T's Alumni Association.

We believe in the importance of involving as many people as possible in leadership education since it benefits all of our members as they continue with their careers beyond U of T.



Lab Tours: Peter Murphy (talking), with first & second year students



Research Days: Students settling into their spots getting ready to listen to professors' research

Bangladeshi Students' Association (BSA)



Total Funding Awarded	\$500.00
MIE	\$100.00
EAA	\$100.00
EngSoc	\$100.00
IBBME	\$100.00
YNCN	\$100.00

The Bangladeshi Students' Association received \$500 in funding from CPSIF, towards our annual networking event that took place on the 25th of January ,2019, from 6:30-9pm. The funding provided by CPSIF, contributed to covering the following expenses in addition to funding from other sources:

- \$350 – Food Expense: Some food items that were provided were cheese and crackers, coffee, pop, fruits, bakery items, and a few Bangladeshi snacks.
- \$125 – Venue Booking:
- \$25 – Gift Bags for Guest Speakers
- \$25 – Promotional \$ Marketing Expense (Ad Boosting on social media & posters)

These funds made it possible to execute a successful Networking event for the 2nd time in our club's history. We were able to make the event much bigger and better, bringing in more mentors and attendees than ever before. Enabled by more focused advertising (online

and posters), we had a great turnout with many undergraduate engineering students in attendance. It helped introduce several new engineering students to our club and professionals present. It helped to introduce and educate several members of the Skule and wider UofT community about Bangladeshi culture and Bangladeshi professionals' contributions to their respective fields.

This event provided our attendees with a unique opportunity to meet BSA alumni who have pursued careers in, and excelled in their respective fields while seeking mentorship and advice regarding their own career paths. Our newer associates, found an excellent opportunity to meet BSA alumni and ask about their experiences, while many newer non-BSA first years found an outlet to meet experts in their individual fields and seek out career advice. All mentors/alumni in attendance from the University of Toronto and other institutions, included:

- Syed Ishtiaque Ahmed - Assistant Professor at The Department of Computer Science
- Doly Begum - Member of the Legislative Assembly, Scarborough
- Salma Sadaf - Investment Representative, RBC
- Kazi Faisal Hossain - General Manager, Sales at Fastenal (Industrial Supplies Company)
- Nabil Arif - Social Innovator and Entrepreneur, Graduate Studies at Harvard University
- Imrul Kabir - Software Engineer
- Razi Murshed - Software/Electrical Engineer
- Aasin Mehmood - Marketing/Sales at Caterpillar

The aforementioned list of mentors attended the event and gave short introductions into their experiences at UofT and the journey to their current professional standing. This gave students an understanding of the mentors they should attempt to connect with, depending on their field of study or interests. Quite a few of our attendees discussed their passions with Doly Begum, hoping to understand how a student could get involved in politics and volunteering in their local communities, while others discussed their dreams to enter the investment banking sector with Salma Sadaf. In general, this was an environment conducive to a better understanding of life after university and how

one can pursue align their passions with their field of study in their future careers. It was due to the funding provided by CPSIF, that the Bangladeshi Students' Association was able to execute such a successful event and invigorate the relationship between UofT professionals/alumni and current undergraduate students.



Attendance at the Annual Networking Night



BSA Executive Team 2018-19

Biomedical Engineering Student Association (BESA)



Total Funding Awarded	\$7,800.00
EAA	\$500.00
IBBME	\$7,300.00

The Biomedical Engineering Student Association (BESA) is a graduate student-run group whose mission is to enhance the Institute of Biomaterial and Biomedical Engineering (IBBME) graduate student experience within the University of Toronto through organizing social, professional, academic, and outreach events. Additionally, BESA serves as the voice for the IBBME graduate student body to the larger UofT and Toronto community. BESA received a total of \$7800 through the CPSIF; \$7300 was from IBBME and \$500 from the Engineering Alumni Association. These funds have greatly contributed to BESA's efforts to achieve this mission.

The first event was the BESA Orientation Week which was organized to welcome incoming students and introduce those who would otherwise conduct their research at different sites across Toronto. This event was lead by a committed and enthusiastic graduate student and their team, who organized a 4-day event early September which included activities funded by the CPSIF, such as a panel with

graduate students, a BBQ, a trivia night, and concluded with a campfire at Christie Pits Park.

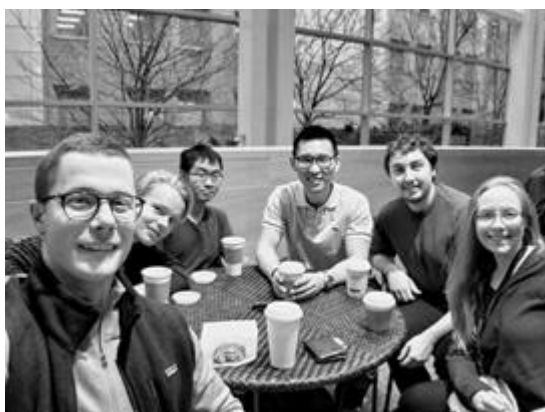
The Student Opportunity Fund was a newly implemented initiative this year to allow any student in IBBME to plan and execute a social, community outreach, or professional development/networking event for IBBME students. This provided anyone in the IBBME student body an opportunity to put forth event ideas that engages a specific research area of the institute, or to connect between different location sites within IBBME. A dedicated amount of the funding received from CPSIF had been put aside for SOF events, where students submit an event idea proposal which is then brought to the BESA Executive Council by the VP Events for review and approval. If approved, a BESA Social Director would be assigned to the event and would work alongside the submitter to plan, advertise through the VP Communications and their team, as well as execute the event. Examples of SOF funded events were bi-monthly Neuromodulation Journal Clubs, Board Games nights, an Illustrator Workshop (with a Statistics Workshop in the works) and a Second City Outing. With the help of the BESA team, all events were well advertised and well received!

BESA's Professional Development Team organized an extremely successful Career Day on March 13th 2019. This full-day event consisted of a series of keynote speakers, hands-on workshops, a LinkedIn photoshoot and networking opportunities with leaders in the biomedical field. Speakers included Dr. Harold Wodlinger, an IBBME alumni, and currently a consultant to the medical device industry. The

Keynote Speaker was Norman Young, another IBBME alumni and currently the Senior Development Manager at Synaptive Medical. The event closed with a Networking Session with the speakers, as well as recently graduated IBBME alumni.

In addition to social, academic, and professional development events, a portion of

the funding received was dedicated for outreach activities. In particular, Science Rendezvous which took place on May 11th 2019. BESA had a large booth with three themes representing IBBME. This included a Tissue Engineering station of creating “organs in a bottle” with glitter, curing Bob’s cancer by throwing “nanoparticles” at the target, and a demonstration of neural rehabilitation techniques.



One of SOF funded events: Neuromodulation Coffee at Jimmy's Coffee



Group of IBBME graduate student volunteers at this year's Science Rendezvous

Bioengineering Student Association (BEST)



Total Funding Awarded	\$1,730.00
MSE	\$100.00
MIE	\$140.00
EngSci	\$250.00
ECE	\$340.00
EAA	\$150.00
EngSoc	\$400.00
IBBME	\$180.00
YNCN	\$170.00

The funding the Bioengineering Student Association (BEST) received via the Centralized Process for Student Initiative Funding (CPSIF) totaled to \$1730.00. This money was greatly appreciated and crucial to ensuring BEST was able to execute many important student-run events throughout the year. CPSIF is the only source of funding BEST receives annually and thus is essential for BEST to deliver knowledge and fun learning opportunities to the Engineering community. Some of the events held throughout the year were an Industry Talk (speakers from Starfish Medical and Synaptive Medical), Summer Research Info Session, Professor Talk and many more.

All of which had the main goal of educating students about the Bioengineering field and

exposing students to the interesting aspects within the field while promoting some of the lesser known areas. Each event provided students new opportunities to learn and ask questions to industry and academic experts which provided students a way to gain information from a reliable source. Specifically, the funding provided allowed for the events to take place with a larger audience and indicate to the guests BEST's appreciation for their speaking at the events. Food for all attendees, gifts for speakers and prizes for competitions were the main areas where funding was used. One specific example of when the CPSIF money was very important to BEST and the events held was during the Student Workshop events. For the Student Workshops, this event was split into three separate meetings which allowed the students to form groups and solve a problem relating the bioengineering field. At the first meeting the project was introduced, teams were formed, and the students were then able to research with their team and ask any questions they had. The second event was where they could check in regarding their project and research talks and question and answer sessions were held. At the last meeting the teams presented their results and the winning team was selected and given prizes in the form of gift cards.

The project selected for the students was to work in groups of 3-4 to work under the general topic of infectious disease prevention. The students were able to select which topic under this general area to choose from, giving the students the freedom to research and understand something they were truly

interested. There are many ways to prevent infectious diseases and this resulted in students having a variety of different proposals to work on, again incorporating each groups individuality and interests. Not only did the students get to learn about a topic they may have not known about and pursue something that may be of interest, but it was a great opportunity to learn about the different resources on campus to gather research materials as well as potentially work with others from different disciplines on these projects.

A major factor in the student's participation was the ability to take control of their project and research areas of specific interest to them and to present their findings in their own personal way. The design of the student workshops was centered around providing students the opportunity to learn in a supportive environment, while encouraging them to be fluid with whatever they chose to do. At each meeting food was provided for all the teams and at the end of the presentation a winning team was selected and given Starbucks gift cards for the whole team. This encouraged participation as well as encouraged students to put effort into making quality presentations.

Overall, the CPSIF funding allowed BEST to hold informative and engaging events throughout the year. We received positive feedback from our events and continuously held a strong turnout. Without the funding none of the events could have been so successful.

BioZone Council



Total Funding Awarded	\$500.00
ChemEng	\$500.00

Our organization is the BioZone Council. This is a group of graduate students who are members of BioZone, which is a collaboration of laboratories in the Department of Applied Chemistry & Chemical Engineering. The total CPSIF funding awarded to our organization was \$500. This money was used to help fund the activities of the BioZone 2019 Fall Research Symposium. This event drew close to 50 attendees. The money helped to pay for the following items:

- Coffee and snacks for attendees;
- Gifts for external speakers;
- Gifts for winners of each competition;
- Pizza and soft drinks as lunch for attendees, and
- Room booking / audio-visual fees

BioZone hosts a research symposium twice annually. This event brings together graduate students, research associates, post-doctoral fellows and professors in BioZone and the University of Toronto in general to share their research with one another. This iteration of the symposium consisted of three competitions:

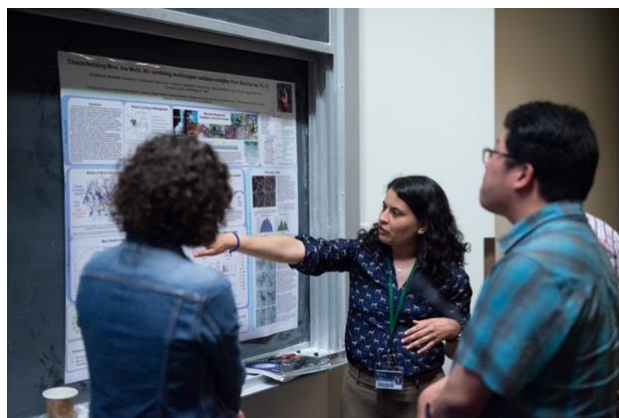
1. Three Minute Thesis: Participants use a

single slide to present their research topic in under three minutes.

2. 15-Minute Presentations: Participants give a formal research presentation with a 15-minute time limit.
3. Poster Presentations: Participants prepare a poster of their research and present it to attendees around the room.

In addition, we had the honour of hosting our guest speaker – Professor Valerie Ward from the Department of Chemical Engineering at the University of Waterloo. Her talk was entitled Cell-free synthesis of isoprenoids using a novel synthetic pathway.

The BioZone Council is grateful for the funding provided. We will continue to strive and organize research and career-related events for years to come!



Christine Romano, a research associate in BioZone, presents her work to a group of attendees

Blue Sky Solar Racing



Total Funding Awarded	\$37,300.00
MSE	\$300.00
MIE	\$6500.00
ChemEng	\$250.00
EngSci	\$1500.00
ECE	\$8000.00
EAA	\$20000.00
YNCN	\$750.00

Blue Sky Solar Racing primarily used the funds for expenses involved with building the team's 10th generation solar vehicle, Viridian, which will be unveiled in June and will be competing at the 2019 Bridgestone World Solar Challenge in Australia this fall. These expenses included new parts for the car such as an upgraded motor and rims, race crew accommodation/travel and camping equipment to support the team throughout their Australian Outback journey.

The funding provided, allows our team to continue to achieve our goal to build and race fully functioning solar cars. By having the past and current cars on display throughout U of T and showing them off at events around campus, we can inspire and show fellow Skuligans that engineering students can really do amazing things - our car and dedicated team members are physical proof of that.

Over the past year, the team has attended a number of events both on and off campus including conferences and exhibitions. Science Rendezvous, Yorkville Exotic Car Show and GoNorth are just some of the many events that the team presented our cars at. We are even going to Montreal to present at Festival Eureka this summer and also will be conducting a full day workshop at the STEAM Project Summer Camp. With our attendance at these events, the team hopes to spread environmental awareness, promote diverse applications of innovative technology, unique problem solving and showcase U of T Engineering to the GTA and beyond.

While on the team, students gain hands-on experience with industry standard practices during the building of the car and have the chance to develop professional skills while working with our industry partners. The over 60 members of the Blue Sky team get the opportunity to develop life long skills that they will take with them after graduation and into the workforce while working on building a solar car for the biannual Bridgestone World Solar Challenge. Within the tight-knit community that is the team, students learn the values of teamwork as well as leadership qualities while taking on smaller projects of their own that they get to see realized when the car is complete.

We received funding from the Mechanical & Industrial Engineering, The Edward S. Rogers Sr. Department of Electrical & Computer Engineering, the Division of Engineering Science, Department of Materials Science &

Engineering, Department of Chemical Engineering and Applied Chemistry, Civil and Mineral Engineering, and Engineering Alumni Association. Due to the generous funding from the departments, the team can continue building cars for competing on the world stage at the World Solar Challenge in Australia. The funding was especially important this year for the materials and tools used to make the best car the team has built yet. In addition, the funding allowed the team to continue to attend events and spread the word about engineering's involvement in sustainable technology and the innovations in the emission-free automotive industry.

The team frequently coordinates with the Engineering Advancement Office to provide tours to alumni to showcase what the team does and what we are working on. Throughout the past year, various alumni have come to our workshop to interact with the current team members and provide their technical expertise. The Blue Sky Alumni are the team's most valuable resource and they frequently engage with the team to aid in the innovation and to help create new solutions to technological problems. The Blue Sky Alumni have been extra helpful this past year by aiding the team in putting together a history book to commemorate 10 generations of solar vehicles.

For more high-resolution photos, check out all of Blue Sky's official photo releases at <https://www.flickr.com/photos/blueskysolar/>



Team members at May Testing learning the systems of Polaris and how the team runs during race conditions. From left to right: Jane Mau, Zoha Khan, Jay Won Lee, Gobind Vasir, Kaveh Dackhah, Paul Babji



James Liu working on the circuits for Viridian



Habaab Hussain talking with Federal Minister of Innovation Navdeep Bains at GoNorth 2019

Canadian Electrical Contractors Association (CECA) U of T Chapter



Total Funding Awarded	\$550.00
Civ & Min	\$200.00
EAA	\$150.00
EngSoc	\$200.00

The CECA/NECA Student Chapter at the University of Toronto enables members to connect with industry representatives in the field of electrical contracting. It enhances the student experience by providing students with opportunities to get field exposure and learn practical aspects of contracting and construction management, as well as networking and career building opportunities. Additionally, students will get an opportunity to explore the

basic aspects of the BIM process and can go through the process of responding to an RFP. The club also allows students to get practical knowledge on running an organization by becoming either team leaders of projects or executive members of the club. In doing so, students will develop and perfect leadership, team working and project management skills. The funding from CPSIF this year was mainly used to purchase food and gift cards for the events. For example, we often order pizza or Krispy Kreme donuts for our recruitment meetings and occasional team meetings. For one of our bigger events, Sustainable Case Competition, we ordered Tim Hortons snacks and beverages, gift cards for 5 judges, and awarded cash prizes for the winner. Similarly, for our other big event, the Green Energy Challenge, we sought help from professionals to assist us in the project. To show our gratitude, we offered some forms of gifts to these professionals. The CPSIF funding has helped our club achieve our goals of engaging students and made our events and workshops successful.



The Sustainable Building Case Competition. From left to right, in the first row, we have Yulin Wu, Ruth Zachariah, Abilash

Sriranganathan, Yiyang Gao, Edmund Wong and Wayne Chu. In second row from left to right stands Greg Peniuk, Professor Brenda McCabe, and Angelo Suntres

The funding was significant to our club as it drastically increased our event attendance. By providing food and snacks at kick off meetings, we were able to attract more students, therefore engaging with the broader student body. Some of our funding was used to purchase gifts for the professional engineers involved with our club, many of whom helped us out tremendously in their free time. The sources of funding from the Centralized Process for Student Initiative Fund includes Engineering Society, Department of Civ/Min Engineering and Engineering Alumni.

CECA worked extensively with alumnus Greg Peniuk, pictured above (second row, leftmost). Greg is a Civ 1T6 + PEY student, and has been involved with the club since it was first started in 2016. Greg was one of the five judges for the Sustainable Building Case Competition. Furthermore, Greg's work while he was part of the club has deeply impacted us. Some of the methodology he developed in 2016 has continuously been used throughout the years in the club, as it proved to be efficient and intuitive.

Canadian Society for Chemical Engineering (CSChE) U of T Student Chapter



Total Funding Awarded	\$2,500.00
ChemEng	\$1,000.00
EAA	\$500.00
EngSoc	\$1,000.00

The funding provided to our club was used to organize and host professional development events and social events for Chemical Engineering students.

Professional Development Events:

- Summer Student Symposium
- “How to Survive First Year”
- First Year Mentorship Program
- Plant Tours
- Sector Info Night

Social Events

- Class parties
- Candy Grams
- Professor Student Mixers
- PEY-Student Mixer
- Graduate-Undergraduate Student Mixer

The funding provided to our club was used to contribute to the vibrant Skule™ community through events such as the following:

Professor-Student Mixers

This series of events provides a platform for students to communicate with their professors in an intimate and friendly environment. It also provides an opportunity for first year students to meet their would-be and future professors. Several professors from the department attended and competed in a game of trivia with students. Student said that this event allowed them to connect with their professors in a non-academic setting and provided them with a better understanding of the research and experience of our esteemed faculty.

Sector Information Night

Every year, alumni are invited from the department of Chemical Engineering and Applied Chemistry to speak about their careers and how studying at U of T have helped them in their professional life. We invited multiple speakers from diverse professional backgrounds. Having this variety illustrated that there are no limits to what an engineering degree can offer them. The sectors we covered include: Environmental, Finance, Public Transit, Process Safety Management, and Government. After a 10-15 minute presentation from each alum, we serve catered food and open the floor for a question and answer portion. Through this event our Chapter keeps the bonds between Alumni and current students strong and highlights the importance of giving back to their discipline society.

Class Parties

CSChE works with Chem Club to host fun parties for each year within the chemical engineering discipline. The locations of this

year's class parties ranged from O'Gradys (second years) to Einstein's (fourth years) to the favourite Chem Common Room (first & third years).

We are thankful for the funding received from the Engineering Society, the Department of Chemical Engineering and Applied Chemistry, and the Engineering Alumni Association. Thank you for supporting our services to the chemical engineering student community.



CSChE Exec team photo from the 68th Canadian Chemical Engineering Conference

Canadian Society for Civil Engineering (CSCE)



Total Funding Awarded	\$1,950.00
Civ & Min	\$1,000.00
EngSci	\$150.00
EAA	\$200.00
EngSoc	\$300.00
YNCN	\$300.00

The Canadian Society for Civil Engineering (CSCE) at the University of Toronto strives to bridge the gap between civil engineering undergraduate students and the professional working industry. This was achieved by providing opportunities for students to develop technical skills, network with professionals, and learn from leaders in the civil engineering industry. This academic year, the University of Toronto student chapter focused on increasing the number of events that provided exposure to large scale civil engineering projects and workshops which would prepare students entering the industry after their undergraduate and graduate studies.

The funding received by CSPIF was used towards achieving our goals for the year, which included increasing the visibility of CSCE to both students and faculty as well as organizing

more events that would expose students to the civil engineering profession. Funding was received from the Department of Civil & Mineral Engineering (\$1,000), the Department of Engineering Science (\$150), You're Next Career Network (\$300), Engineering Society (\$300), and Engineering Alumni Association (\$200). The total amount of funding provided was greatly respected as it allowed our club to continue and further improve on providing professional development opportunities to civil engineering students.

We were able to plan a total of twelve events throughout the year which included multiple guest lectures from industry leaders and workshops that help build upon students' technical skills and abilities. Most of the funding received was spent towards providing food and drinks for events and booking our etiquette dinner event at the University of Toronto Faculty Club. Furthermore, many events were in collaboration with engineering design teams and student associations at the University of Toronto to increase visibility and promote events for both groups.

To start the year, a membership sign-up event was organized to recruit incoming civil engineering students and encourage other students to become members of both the CSCE U of T chapter and Canadian chapter. We also hosted a Professional Experience Year (PEY) mixer in collaboration with the Civil Engineering Club where students currently on their co-op internship would present about their role as an interning engineer at their respective companies to students interested in the co-op program. We

had over fifteen PEY students attend the event and present about their experiences which ultimately increased the overall interest in students seeking a professional civil engineering career in their future endeavours. CSCE also organized a recruitment event at the end of the year to present about the club's future goals and recruit executive members for subsequent academic years.

In addition, a series of guest lectures were hosted throughout the year to provide students with the opportunity to learn about ongoing civil engineering projects around Toronto and potentially further their interest within the profession. In November, we hosted an ARUP Information Session where Yen Wu, a structural engineer with ARUP, presented about ARUP's ongoing projects and provided further details about the role of interns and junior engineers for students interested in their Professional Experience Year (PEY). At our second guest lecture, we hosted Dr. Lloyd McCoomb, the former president of the Greater Toronto's Airport Authority, who presented a unique and informative lecture on transportation, project management, and the construction and planning of the Pearson Airport revitalization. Our next guest lecture was a collaboration with the Canadian Electrical Contractors Association (CECA) where we hosted Duncan Rowe, an engineer from RJC and a member of the Building Science Certificate Steering Committee for the University of Toronto, who spoke about building science and his career working as a sustainable design specialist in building restoration across Ontario. Our last guest lecture was civil engineering

career panel hosted in collaboration with Engineers in Action (EIA) which featured five panelists from various streams of civil engineering currently working in industry. These panelists include Peter Luo, a transportation engineer with IBI, Ernesto Patino, a building science engineering with WSP, David Gerhardt, a structural EIT at LEA Consulting, Matthew Bye, a technical director at Maffei Engineering, and Michael DeSanti, a water design specialist at Jacobs. Collectively, our series of guest lectures were successful as it attracted undergraduate students from all years as well as students currently on their PEY in attending. Dr. McCoomb, Mr. Rowe, Peter Luo, Ernest Patino, David Gerhardt, and Michael DeSanti are also alumni of U of T Engineering, so we were excited to host them and extremely grateful for their continuous contribution to the engineering community at the university.

Our biggest event this year was our etiquette dinner hosted at the University of Toronto Faculty Club on February 7, 2019. This event focused on how to network and socialize with professionals in the industry. We invited civil engineering students from all years, professors teaching and conducting research at the University of Toronto, leading engineers in industry, as well as engineering alumni to attend the event. The event was hosted by Leanne Pepper, an etiquette coach at the Faculty Club who focuses on etiquette for career and personal success. Overall, we had 28 students, five professors, one professional from industry, and two engineering alumni attend the event. The professors included Marianne Hatzopoulou, Brenda McCabe, Matt Roorda, Evan Bentz, and

Daniel Posen. The industry professional included Dawn Tattle while the two engineering alumni included Nico Valenton and Kasra Modares. The event was extremely successful as the etiquette dinner planned for last year was cancelled for financial reason. As a result, the funding we received from CPSIF for 2018 to 2019 was greatly valued and at the highest level of appreciation as we were able to host the etiquette dinner event this year.

Overall, we are extremely grateful as the CPSIF funding allowed the team to host a multitude of professional development events which connected individuals from all levels of civil engineering including students, alumni, professors, and industry professionals. In

comparison to last year, we have increased the total number of events both independently and in collaboration with other teams. The number of guest lectures has increased which resulted in an increased engagement from engineering alumni as both participants and speakers.

Lastly, our etiquette dinner was able to fully integrate all individuals within civil engineering at the University of Toronto to further expand the professional development and networking skills of undergraduate students and help build a stronger connection between students and industry professionals. We look forward to the continuous support of CPSIF in future years as the funding provided is critical to our success.



Etiquette Dinner at the Faculty Club: Presented by CSCE and Leanne Pepper

Carbon Cutting Racers (CCR) - formerly the U of T Supermileage Team



Total Funding Awarded	\$18,850.00
MSE	\$100.00
MIE	\$10,500.00
ECE	\$1,000.00
EAA	\$4,000.00
EngSoc	\$2,500.00
YNCN	\$750.00

The University Toronto Carbon Cutting Racers (CCR), formerly known as the University of Toronto Supermileage Team is a student-run design team that builds, designs, and races ultra energy efficient vehicles in the annual Shell Eco-marathon Americas. The Shell Eco-marathon is a global competition for students all around the world to see whose vehicle can go a set distance using the least amount of energy.

The generous funding from CPSIF was used towards fabricating our new vehicle, Bullet for the 2019 Shell Eco-marathon Americas competition at Sonoma Raceway. It allowed our team to successfully design and build a new monocoque aero body. Funds were used to purchase composite materials such as carbon

fiber, fiberglass, structural foam, and epoxy to manufacture the plug, mold, and aero body. CCR hosted and attended numerous events throughout the year such as the Myhal Open House and Club's Fair to talk with students and the public. The team was also featured on media channels such as Breakfast Television and SiriusXM to provide a glimpse into the overall Skule™ community.

The funding received was critical for our new monocoque aero body. Without it, the team wouldn't have been able to complete a new vehicle. Sources of funding include: Department of Mechanical and Industrial Engineering, Department of Electrical and Computer Engineering, Department of Materials Science and Engineering, Engineering Alumni Association, Engineering Society, and You're Next Career Network.

The team engaged alumni through a variety of channels, including having alumni as capstone clients and consulting with them for design reviews and best practices. On behalf of CCR, the team would like to thank the University of Toronto Faculty of Applied Science and Engineering for their continued support towards innovative energy transportation solutions.



Bullet at the 2019 Shell Eco-marathon



CCR at the Shell Eco-marathon Americas 2019



*Breakfast
Television
Interview with
Lauren Howe*

Chemical Engineering Graduate Students' Association (CEGSA)



Total Funding Awarded	\$5,000.00
ChemEng	\$5,000.00

The Chemical Engineering Graduate Students' Association (CEGSA) is incredibly grateful for the \$5000 received from the CPSIF this year. Our association has been active for 24 years and is an integral part of the graduate student experience in the Department of Chemical Engineering and Applied Chemistry by creating several opportunities for student development and a community within our department. The money we receive from CPSIF directly funds our social, academic, and professional development events by helping with food, supplies, and other expenses. CEGSA hosts many events throughout the school year, including: holiday lunches, weekly coffee breaks (Fika Fridays), sports events, a semi-formal dance, networking events, and more. A few specific events are described below.

Our annual alumni panel is one of our biggest events of the year, where we have alumni from the department currently working in industry come talk about how they utilized their experience in graduate school in industry and to

help advise our students. This year the event was held on April 11, 2019 and our panelists were: Andrew Mwangi, Judson Lew, Genevieve Conant, Jeffrey Castrucci, and Jocelyn Zuliani who all have graduate degrees from our department. The event has been extremely successful because it gives students ideas for alternate career paths beyond academia, provides examples on how previous students developed their career paths, advises current students on professional development, and allows for networking with professionals who have gone through the same grad program. The event was also partially funded by the UTGSU Conference and Academic Engagement Grant.

As part of the initiative we started last year to help reduce the stigma surrounding mental illness our mental health committee organized an event for Bell Let's Talk Day on January 30, 2019. The event consisted of several different activities aimed at promoting mindfulness and mental wellness such as a speaker from the Conflict Resolution Centre who spoke about supervisor-student conflicts, a mindfulness exercise focused on eating an Oreo, a mandala colouring exercise, and therapy dogs. Additionally, we had a photo booth where students and staff were able to take pictures that were then posted to our Facebook page with the Bell Let's Talk border to help raise money towards mental health. Funds for this event towards pizza, apples, and drinks which were successful in attracting attendees who became very engaged with the activities.

In addition to improving the student experience within our department, CEGSA also collaborates

outside of the department to contribute to the entire Faculty of Engineering community. We host annual events in collaboration with the Graduate Engineering Council of Students (GECoS), which comprises all graduate engineering associations, and with the undergraduate student association Chem Club. With GECoS we encourage professional development, cooperation between departments, and student wellness by helping organize the annual Career Fair, Graduate Research Days, the Halloween party, a faculty-wide Mental Health Carousel, and more. With Chem Club we organize an undergrad-grad student mixer to network with undergrads and talk about future opportunities in grad school.

The events that CEGSA would not be possible without the annual funding we receive from the CPSIF. While we do get funding from our own department and from grants for specific grants, the continuous funding from the CPSIF allows us to continue and expand on CEGSA's legacy of providing for the academic, professional, social, and health needs of our grad students.



Holiday Lunch



Bell Let's Talk Day Event

Civil Engineering Club



Total Funding Awarded	\$2,000.00
Civ & Min	\$2,000.00

This funding was important to our club because it helps us perform all our club's functions for undergraduate students. These functions include the Club's social, mentorship and academic activities.

The largest social activity that this funding contributes to is the CIV MIN Dinner Dance that occurred on November 23, 2018. This dinner dance is the largest event that the Civil Engineering Club hosts each year. This event brings together students, faculty and alumni for an evening of fine dining and socializing. At this event, the "Professor of the Year" award along with gifts for all the professors that attend dinner dance are given out as a form of gratitude to the faculty. The funding contributed to the decoration, photographers, DJ, venue, and transportation to/from the venue.

The mentorship program run by the Club connects First-year Civil engineering students with upper year students. Through this program, two Upper year students were paired up with two First-year students so that the First years would obtain knowledge from different mentors. The Mentorship coordinators used the funds to

host events such as the Mentor-Mentee Bingo Night and Board Game night. The Club also host other events to connect between the years. These events include the 4th year information session where students currently on their Professional Experience Year (PEY) can ask 4th years how the transition was from work to school and what to expect when coming back, and PEY information session for the 3rd years who want to go on PEY.

The Club organizes student transportation to Survey CAMP for third-year students that cannot drive themselves to CAMP. This transportation makes it possible for many students to reach camp that do not have another alternative. This funding also contributed to the construction of a monument at survey camp. The monument is meant to be a useful object for students while they are at camp. This funding goes towards a student-run committee of third-year civil engineers who design and build the monument before CAMP 1T9. For this year's monument project, one of the projects that will be implemented this summer is a tether ball game. When the CIV2TO's went to Camp they found that a recreational game is needed since the students go up there for two weeks.

Overall the funding that was provided by the Department went towards strengthening the Civil community through the various events hosted by the Civil Engineering Club. The funding has helped the Club provide a variety of events to cater to the needs of the students so that they can grow academically and professionally during their Undergraduate degree.



The class of CIV2T0 posing with Professor Posen who won the "Professor of the Year" Award at the Eglinton Grand



The image on the left are students going up to CAMP 1 and the image on the right are the students going up to CAMP 2 on the bus services arranged by Civ Club

Civil Engineering Graduate Student Association (CEGSA)



Total Funding Awarded	\$1,000.00
Civ & Min	\$1,000.00

The CEGSA team is grateful for the financial support from the Department of Civil and Mineral Engineering in the form of CPSIF. As the central representative of the graduate student population in the department, we strive to provide great opportunities throughout the academic year and sponsor events of common interest to its membership.

CEGSA hosted a variety of activities, included welcome orientation, movie nights, and academic seminars. Our monthly coffee break is a long-held tradition that helps students to alleviate stress from studying and research. We also engaged in departmental meetings and shared the outcomes of those meetings with the student body. As a member of the Graduate Engineering Council of Students, CEGSA collaborated with other U of T engineering departments to host inter-departmental events.

Our most notable event was held on January 22, 2019. Through extensive planning and preparation, we launched our inaugural Civil Industry Night. This event aimed to provide

opportunities to graduate students who wish to interact with professionals in the industry and for organizations to raise awareness and presence on the U of T Campus. The event was group into two sessions:

1. a panel discussion for practicing engineers to discuss their career path, and
2. an interactive networking session for industry representatives and students.

The event attracted more than 150 engineering students who had the opportunity to network with over 30 representatives from 14 local companies and organizations. Following the event, CEGSA reached out to the participating representatives and received warm feedbacks – everyone is fond the idea of a second annual Civil Industry Night.

Overall, we are providing a positive environment for graduate students in the Civil and Mineral Engineering Department by organizing an array of activities that will engage them academically and professionally. On behalf of the CEGSA team, we would like to express our upmost gratitude to the Department for their financial support in the 2018-2019 academic year.



Civil Industry Night – Panel Discussion

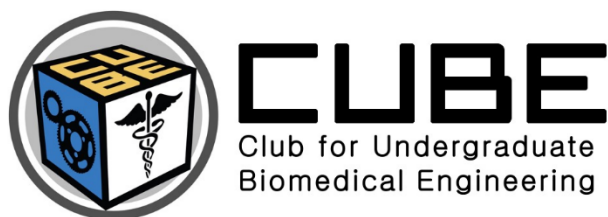


Civil Industry Night – Networking Session



Monthly coffee breaks

Club for Undergraduate Biomedical Engineering (CUBE)



Total Funding Awarded	\$4,505.00
MIE	\$500.00
EngSci	\$750.00
ECE	\$650.00
EAA	\$500.00
EngSoc	\$250.00
IBBME	\$1,655.00
YNCN	\$200.00

In the 2018 – 2019 academic year, CUBE hosted more than 10 events in the Skule™ community to introduce and promote biomedical engineering at the undergraduate level. This year, CUBE was successful at maintaining a balance between networking events and opportunities for students to gain practical skills in biomedical research and design.

In achieving this goal, one of our most successful annual events was CUBE's Industry Mixer, which introduced undergraduate students to the biomedical engineering industry and connected attendees with industry professionals. Six companies were represented during this year's Industry Mixer from different areas of biomedical engineering, including medical imaging, design consultation, and biomaterials. Representatives from Conavi

Medical, InteraXon, SciCan, StarFish Medical, Synaptive Medical, and Interface Biologics brought diverse perspectives and career options within the field. Among these representatives, there were also Skule™ alumni - Katlin Kreamer-Tonin (EngSci 1T6+PEY) from Synaptive Medical and Martin Par (Mech 1T4+PEY) from StarFish. The funding received allowed CUBE to provide refreshments for attendees and give small gifts to our invited guests to express our gratitude.

Another successful event was our annual design competition, the 10th Biomedical Engineering Competition (BMEC). We challenged our participants to propose engineering solutions to protect children with congenital insensitivity to pain with anhidrosis (CIPA) from potential injuries in various everyday settings. The competition was attended by 11 teams from various engineering disciplines. This year, our judges were Martin Par (Mech 1T4+PEY) from StarFish Medical, Ali Mojdeh and Daniela Chan-Viquez from Holland Bloorview Kids Rehabilitation Hospital, Phillipa Gregory from Toronto Rehabilitation Institute, and Kimberley Lau from University of Toronto. We provided refreshments to judges and participants, as well as gifts for judges who took time on a weekend to engage with and mentor our participants. The funding provided was also used for room booking, supplies needed for design prototypes, and prizes of \$200, \$150, and \$100 awarded to the top three winning teams.

After a successful pilot series of Lab Skills Workshops last year, we once again offered hands-on Lab Skills Workshop in collaboration

with the IBBME Undergraduate Teaching laboratory. Each workshop (one offered per semester) was attended at full capacity, providing the participants with an opportunity to learn practical wet-lab skills. Funding received allowed CUBE to express gratitude to the teaching laboratory coordinator for supporting the workshops, and to provide participants with certificates of participation. Due to the increased interest of students, we hope to expand the workshop series to more numbers per semester in the next year.

CUBE is a fully student-run club with no external sponsors for financial support, and CPSIF serves as our primary source of funding to support the success of our events. We are beyond grateful to departments and groups who provided support to CUBE in the past year. With their generosity and support, CUBE could successfully continue its mission of promoting biomedical engineering at an undergraduate level.



Images from 2018 Industry Mixer, (left) attendees listening to introduction from Mr. Brian Mac Giolla Rí from Conavi Medical. (right) students networking with Mr. Martin Par (Mech 1T4+PEY) from StarFish Medical



Top three teams of 2019 Biomedical Engineering Competition

1st Place (left) – Team SPLICED: Hailin Wang, Smile Peng, Taylor Faiczak, Armaan Lalani

2nd Place (middle) – Adaptive Solutions: Matthew Lee, Rutwik Bangali, Luke Caccamo, Rakib Ahmed

3rd Place (right) – Team EVAK: Eva Lie, Kelly Chu, Alyson Wong, Valerie Ajayi (not in picture)

Data Science Team



Total Funding Awarded	\$275.00
MIE	\$100.00
EngSci	\$75.00
EAA	\$50.00
YNCN	\$50.00

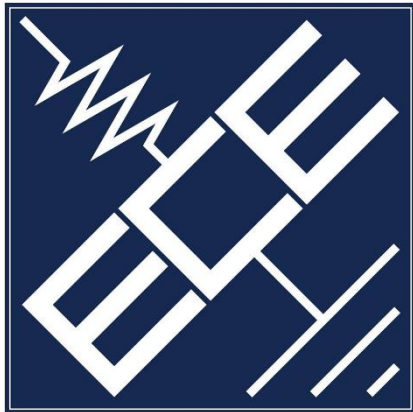
This year, our club saw impressive growth as we expanded to five project teams. Whereas we typically demand that participants rely on their own computational resources to run their programs, we were able to offer some computing credits upon request by some of the groups. This was more than just an alternative to their own laptops; accessing these resources allowed the students to accelerate their programs to industrial level speeds and gave them the experience of managing remote workstations. The CPSIF funds for our club were allocated to two items: a large portion towards setting up technical resources for our projects, and a lesser part towards audiovisual equipment and booking fees for our workshop series.

We additionally hosted a series of five workshops on applied machine learning, guiding participants. These workshops emphasized both the programming and theoretical aspects of machine learning but had several demonstrations that the participants could experiment with. This year, we were able to hold our workshops in small lecture rooms with

capacity above 60, with full audiovisual capability for our demos. This allowed us to bring in up to 40 participants per workshop, not possible when working in group study rooms without good projectors or microphones. Our work this year has allowed 40 students, from a broad range of disciplines and years, to collaborate on projects invaluable to their careers. We help develop their data science skills and programming capabilities, while also offering a six to eight-month intensive project experience. It has also given them new perspectives on rather mundane subjects; one group was asked to find creative applications for weather data and developed an energy pricing system based on wind and hydro surges. While our impact on the visible culture of school may not be as deep as the many spirit groups present on campus, we take pride in the spirit of inquiry and professionalism that our club fosters.

We received our contributions from YNCN, MIE, Engineering Science, and the Engineering Alumni Association. We thank all these groups for their contributions, and we tried our best to align our objectives with their stakeholders. Barring any graduate members who may be undergraduate alumni, unfortunately we were not able to contact any known alumni for our events due to them being primarily technical affairs. However, we would like to host more open sessions in the future, including possible project exhibitions or data science career panels. We will do our best in the future to ensure that the generosity of the alumni is repaid in kind.

Electrical and Computer Engineering Club



Total Funding Awarded	\$5,500.00
ECE	\$5,500.00

The Electrical and Computer Engineering Club is student club focused on providing resources and fun to undergraduate engineer students in Computer Engineering and Electrical Engineering. This year, the ECE Club received \$5,500 from the CPSIF.

Funding was primarily used in running our annual ECE Dinner Dance, which is open to all undergraduate engineering students and their friends. Additionally, this year ECE Club purchased items to aid in social events such as Nerf Wars, Bagel Bar, etc. which encouraged ECE students from all years to come out and interact with one another as well as with people from other disciplines. This funding was also used to improve the common spaces by improving seating and the overall environment of the shared spaces.

By successfully running an incredible Dinner Dance for the students and introducing new and versatile social events for every student to

participate in, ECE Club demonstrated that its purpose is to serve the undergraduate community. Every year we try to get more students involved in initiatives, and by making the steps we have this year, we are heading in the right direction to improve the ECE community and encourage future involvement.

Unfortunately, we were not able to engage alumni this year, but a potential idea of creating an Alumni Speaker Series for ECE undergraduate students was discussed and will be mentioned in the transition for the incoming executives.

Engineering Science Club



Total Funding Awarded	\$7,500.00
EngSci	\$5,000.00
ECE	\$1,500.00
EAA	\$500.00
IBBME	\$500.00

We would like to thank all members of the donor organizations for their support of the Engineering Science Club's initiatives. The Club received funding from the Department of Engineering Science, the Department of Electrical and Computer Engineering, the Institute of Biomaterials and Biomedical Engineering, and the Engineering Alumni Association. The CPSIF is the largest source of funding that the Engineering Science Club receives. It is essential to the Club's operations, which are all focused on enhancing the student experience within the Engineering Science community.

The funding provided through the CPSIF was key to allowing the Club the opportunity to host the annual Engineering Science Dinner Dance. This year's event was a huge success, hosting 300 attendees including students and faculty within the department. Compared to the

previous year's event, the Club was able to provide centralized bus transport to the event to make it more accessible for all students regardless of living location. In addition, the event was hosted earlier in the year to avoid midterms for students in all years. This dance is also a great opportunity for 1st year students to get to know more people in the community, and to have fun outside the campus environment. A highlight of the event was the Engineering Science Movie, which is a tradition within the Club to create a short film that depicts aspects of our community in humorous light. The Club funding also allowed the rental of the centralized A/V system of the venue, ensuring that everyone was able to enjoy the student-made production to its full capacity!

The Club also aimed to provide resources about academics and career opportunities to students within the program. In the fall, the Club hosted a PEY Mixer, where younger students got to chat with those who had completed their PEY Co-op terms to learn about their experiences through the job search process as well as their workplaces. We strongly believe in the value of peer mentorship within the community, and therefore we worked to ensure that we were able to create opportunities to build these relationships through the Club's events. To ensure maximum attendance from both prospective PEY students and post-PEY volunteers, the Club purchased some pizza, as well as basic supplies such as name tags.

This year, the exec team worked to kick-off a new initiative focused on connecting students to professionals, most often alumni from U of T

Engineering programs. Over the course of the year, the Club hosted several “Fireside Chats”, where our guests could share their stories with the EngSci community in a more informal setting. The funding provided through the CPSIF not only went towards purchasing snacks for the events and gifts for our guests, but also the purchase of audio recording equipment so the discussions could be recorded in podcast style. These recordings will be uploaded to our Club website so that students who weren’t able to attend the events can listen to the discussions and learn about different perspectives on a broad range of careers.

Throughout the year, the Club also hosted several community-building events, including board game nights, video game tournaments, and the Holiday Party. These events were very well received, bringing in lots of students to relax during stressful times of the year. The funding provided went towards purchasing food at the events, games, and small prizes for the tournaments. We believe in the importance of providing a space for students to enjoy themselves and share experiences outside of academic settings, and has worked to deliver these experiences thanks to the support of the donor organizations.

Thank you to all the organizations who provided the funding required to make Club’s projects successful. It is the Club’s purpose to engage students for academic, career, and community support, and the events organized throughout the year are all important to achieving that goal. We hope that you will continue to support our organization to help the Club continue these

initiatives, and to start new ones in the upcoming academic year!



The EngSci Dinner Dance hosted 300 students and faculty members. The venue had excellent built-in A/V capabilities, which the Club utilized to showcase the EngSci Movie



The EngSci Holiday Party created a festive vibe near the end of the semester, with decorations adorning gingerbread houses as well as the EngSci common room

Engineers in Action - formerly Bridges to Prosperity



Total Funding Awarded	\$5,050.00
Civ & Min	\$1,000.00
EngSci	\$300.00
EAA	\$2,500.00
EngSoc	\$1,000.00
YNCN	\$250.00

This year, Engineers in Action received a total of \$5050 through the Centralized Process of Student Initiative Funding (CPSIF). This funding was used towards our current bridge project located in Lipez, Bolivia. The funding was able to cover 40% of our bridge project expenses. Some of the expenses that were covered include professional engineering services, site surveys, site preparations, equipment, building materials and much more.

Through the construction of our bridge, the small communities of Lipez -- Lipex, Calera, Convento, and Huayna Cochi (approximately 460 families altogether) -- will be able to cross a river that is normally impossible to cross at least 5 months of the year due to flooding. From our impact, these communities will be able to gain access to the local school, hospital, and markets nearby.

Not only does Engineers in Action make an impact globally, but our team provides an environment where students at U of T can apply their technical and transferable skills in meaningful ways. This year, our team was able to host numerous events targeted towards educating the student body and engaging alumni. Through a series of workshops throughout the year, students were able to develop skills related to the structural design of bridges, project management, construction safety and much more. Students also had the opportunity to work with and learn from U of T alumni, Michael DeSanti and David Gerhardt, who hosted design workshops and provided their technical inputs and guidance throughout the year.



Bridge Design Workshop with UofT Alumni, David Gerhardt

Our team believes that we continue to make an impact both locally and globally by applying our skills as Engineering students. Students can take pride in knowing that they are assisting hundreds of rural citizens in South America through designing, funding and constructing the implementation of a bridge annually. The funding received through CPSIF helps us become one step closer to bridging the gap of isolation in developing countries.



AutoCAD Workshop at the University of Toronto

Engineers Without Borders (EWB)



Total Funding Awarded	\$5,850.00
MSE	\$1,00.00
MIE	\$1,250.00
ChemEng	\$300.00
Civ & Min	\$300.00
EngSci	\$800.00
ECE	\$500.00
EAA	\$1,500.00
IBBME	\$1,000.00
YNCN	\$100.00

The Engineers Without Borders Canada University of Toronto Chapter (EWB U of T) have had the privilege of receiving \$5850 for the 2018-2019 academic year through the Centralized Process for Student Initiative Funding. We received financial support from the Department of Mechanical & Industrial Engineering, the Department of Chemical Engineering & Applied Chemistry, the Department of Civil & Mineral Engineering, the Division of Engineering Science, the Edward S. Rogers Sr. Department of Electrical & Computer Engineering, the Engineering Alumni Association, You're Next Career Network, the Department of Materials Science and Engineering, and the Institute of Biomaterials & Biomedical Engineering. Through the generous support of the departments and organizations

associated with the Faculty of Applied Science & Engineering, our Chapter was able to contribute to significant impact on campus, in Toronto, and globally, supporting a grassroots movement among the 40 university and professional chapters across Canada.

On campus, EWB U of T organized workshops on a weekly basis inviting university professors, renowned professionals, and our fellow students to teach and engage our membership in critical discussions about international development. Throughout the year our chapter hosted a total of 23 member learning workshops, covering topics from responsible consumerism to failing forward. Furthermore, on campus, our Chapter worked to stimulate change in our university's food system, students' understanding of indigenous allyship, and our faculty's engagement local poverty. EWB U of T lobbied food suppliers on campus to source a portion of their produce from Fair Trade certified food providers - a movement which contributes to the betterment of smallholder farmer lives through advocating for better prices, decent working conditions, and fair terms for the farmers and their workers. Moreover, the Chapter hosted 8 indigenous allyship focused events this year, collaborating community organizations including GreenScience and Waterfirst. Lastly, we invested in the next generation of social change leaders through our continual engagement with high schools. This year, our Chapter engaged 100+ high school students in ongoing design projects and in our annual professional development conference, working to expose students to engineering design thinking in a social context, to international development

work, and to break the misconceptions they have about developing nations.

EWB U of T has worked in a wide array of collaborative projects with reputable non-profit organizations in the city of Toronto. This past year, we continued partnering teams of engineering students with organizations to work with them in solving design challenges inhibiting them from maximizing their social impact. For example, one design team worked with the Toronto Shelter Movers, an organization that provides safe and respectful moving services to people fleeing abusive households and Big Brothers Big Sisters, an organization dedicated to mentoring 41,700+ children and young people. In total, we partnered 20 student volunteers with 4 partner non-profit organizations throughout the year. Our Local Poverty Alleviation Initiative reached outside of Toronto to engage with academics not only from U of T, but also from McGill University, University of Alberta, and the Homeless Hub. The expertise collected informed their 'Map the System' report on the lack of access to services for homeless and impoverished youth.

Our Chapter, although local to Toronto, has had an impact on the international scale. Annually, we have hosted rising African leaders from countries such as Cote D'Ivoire and Kenya, investing in their personal development by hosting them in Toronto and exposing them to our culture and how their businesses operate in a Canadian context, allowing them to broaden their perspective and extract transferable best practices. This year, our chapter hosted two African leaders – Ivorian entrepreneur, Kouakou

Alexandre Duffi, and Kenyan entrepreneur Fiona Otieno. Further, every year EWB U of T sends undergraduate Fellows to volunteer with our national organization, EWB Canada, over the summer. Each volunteer gets staffed with one of the organization's ventures in one of Canada, Ghana, Kenya, Malawi, Zambia, Uganda, Côte d'Ivoire, or Ethiopia and is also responsible for sharing their learnings with the Chapter upon their return to university in the Fall. Natalie Enriquez-Birch (TrackOne 2T2) will be travelling to Soroti, Uganda this summer. She will be working in Communications for an agribusiness incubator called Matunda Hub.

In addition to the above, our Chapter held 3 events this past academic year which brought in U of T alumni to share with our audience their professional and personal life experiences to date. These events, including a Global Engineering Panel, a Women's Day Campaign, and a Global Development Case Competition Planning Session involved alumnus Rashmi Sathar, David Taylor, Malik Ismail, Trent Dickson, Enakshi Shah, Praneet Bagga, Allison Wallis, Lucia Lopez, and Mark Summers. This year, our chapter members have also been recognized on a larger stage. Lia Codrington (EngSci 1T9 + PEY) and Natalie Enriquez-Birch (TrackOne 2T2) travelled to Iqaluit as delegates of the Arctic Youth Ambassador Caucus. Their experience was published by U of T Engineering News. Lia was also recognized for her work leading the Indigenous Allyship Project with the Outstanding Junior Fellow award at the EWB's annual National Conference. Our Political Advocacy Portfolio Lead, David Boroto (EngSci 1T8 + PEY) was also among this year's Cressy

Award Class.

Lastly, for additional statistics on our performance as a student organization this past year at U of T, please view our EWB U of T 2018/19 Year in Review Presentation [here](#). Please know that your support for our organization has made it possible for us to continue our work in creating positive social impact. You are not just supporting a student club, you are supporting a movement. On behalf of EWB U of T, thank you.



Students visit Evergreen Brickworks on a trip to learn about Toronto's Food System



Member Learning Session, EWB x Caffiends: Tracing Your Coffee from Bean to Cup

Future-Living Lab



Total Funding Awarded	\$2,100.00
MIE	\$400.00
Civ & Min	\$500.00
EAA	\$1,000.00
EngSoc	\$200.00

The Future-Living Lab is a student run innovation lab with a passion for exploring the future of affordable and sustainable housing. This year, we received \$2,100 through CPSIF. The main use of our funding in the 2018-2019 year was to host a speaker's event on March 22nd 2019. We had a panel discussion on the topic of multidisciplinary collaboration for the future of sustainable design. We also bought a roll out banner that we used at our event and will be re-using at future outreach and tabling events. Other marketing materials included stickers and buttons to give out. Some funding was used to host our squarespace website which had been incredibly important to our groups online presence. Many members and project partners have found our group through this website.

This funding was super important in helping our group hold a successful event where we were able to engage with the larger design community. As a group we learn from our peers and the professionals in our industry and we

were very lucky to have three distinguished panelists who are on the top of their respective fields namely Lisa King (City of Toronto, Senior Policy Planner), Alex Lukachko (RDH, Building Scientist) and Holly Jordan (B+H, Architects). Our funding ensured that we were able to keep the event free and open to all students, faculty and industry professionals. It was a great opportunity to share ideas and discuss important issues with a wider community that could not have been possible without funding. The money we received also helped us ensure that we were able to create professional marketing materials in order to send our message about the importance of sustainability in the design industry.

Alumni that participated:

- Daniel Calero: Alumni Advisor role (Founder of Future-Living Lab)
- Holly Jordan: Speaker at March speakers event
- Adriana Menghu: Designer in the Architecture team



Future-Living Lab Team photo

Galbraith Society



Total Funding Awarded	\$900.00
MSE	\$100.00
MIE	\$100.00
EngSci	\$150.00
ECE	\$100.00
EAA	\$200.00
IBBME	\$100.00
YNCN	\$150.00

Galbraith Society (GS) is focused on improving academic experience for student engineers enrolled at the University of Toronto by providing opportunities for highly motivated students to gain exposure to their fields of interest through workshops, research programs, and events that appeal to their passion for engineering and research. Galbraith Society runs initiative like REX, Undergraduate Journal and various events focused on increasing their interest in research.

The financial support this year aided our team in planning research workshops and promoting our undergraduate journal. This year Galbraith Society hosted events like Securing the Bag, R workshop in collaboration with techXplore and Grad School talk. Money was also spent on expenses for REX and the Undergraduate Journal.

Securing the Bag was an event focused on helping students secure summer research positions. There were panelists who answered their questions and addressed concerns about how to secure a research position and perform well during the research term. Dinner was also served, and it provided opportunity for the attendees to network.

Galbraith Society hosted Introduction to R workshop in collaboration with TechXplore. It served as an introduction to statistic and data analysis for the attendees. These skills are useful for research positions as well as while working in various industries. Pizza dinner was also served.

Galbraith Society Undergraduate Journal is also working with the PEY conference to publish a special edition of the journal with articles regarding student's experiences while on PEY. Funding will be use for publication of the journal. The funding helped organize events for REX and Town Halls with our executive teams. None of these initiatives would be possible without the funding provided. The funding has helped the club grow and connect with more students. Our club is yet to engage with any alumni this year but hopes to do so in future. We look forward to continued support for Galbraith Society under CPSIF.

Human Powered Vehicles Design Team (HPVDT)



Total Funding Awarded	\$5,500.00
MSE	\$1,000.00
MIE	\$500.00
EngSci	\$1,500.00
ECE	\$750.00
EAA	\$1,000.00
YNCN	\$750.00

The University of Toronto Human-Powered Vehicle Design Team (HPVDT) is an organized group of engineering students dedicated to learning and teaching engineering design principles. We gratefully received an award of CAD\$ 5,500.00 by the Faculty of Applied Science & Engineering (FASE) for the 2018-2019 academic year.

This funding was used primarily for buying building materials such as carbon fiber, epoxy resin, and workshop tools as well as safety equipment. Specifically, we used these materials to build Zephyr, the vehicle with which we participated at the ASME HPVC Student Design Competition in Michigan, USA, where we earned second place for our university. This funding also allowed us to cover part of registration costs.

In the process of building Zephyr, we engaged over 15 current engineering students, who owned the design of several subsystems. These students learned to use engineering software,

composites manufacturing, and workshop tools. We also continued to receive technical assistance from alumni Bruce Hu and Thomas Ulph.

HPVDT also participated in the 2018 World Human Powered Speed Challenge, where we ranked among the top 5 teams. We continue to work on exciting and meaningful projects that encourage the involvement of new members.



HPVDT students at the ASME competition in Michigan



HPVDT students receiving an award

**Institute of Electrical and Electronics
Engineers (IEEE)**



Total Funding Awarded	\$11,450.00
MIE	\$250.00
EngSci	\$1,200.00
ECE	\$7,000.00
EAA	\$500.00
EngSoc	\$2,000.00
YNCN	\$500.00

The Institute of Electrical and Electronics Engineers University of Toronto Student Branch (IEEE U of T Student Branch) received a total of \$11,450 awarded by CPSIF.

Throughout this school year, IEEE U of T hosted 20+ technical and professional development events including speaker series, hackathons and competitions, conferences, and workshops. The organization of our events would not have been possible without the support of CPSIF. The funding we received went mainly towards the purchase of electronics and hardware for our competitions, hackathons, and workshops; gifts and compensation for our seminar speakers and competition judges; food and activities for our event participants; venue booking; etc. Specifically, the club spent \$4700 on electronics and hardware for the Hardware Certification Workshop and MakeU of T; \$6000 in total for room booking fees for weekend events such as MakeU of T, NewHacks, and

Hello Con; \$800 for gifts to thank keynote speakers at conferences and talks; \$5000 in prizes for MakeU of T and NewHacks; and \$12,000 on food for our 20+ events.

One of the highlights of our work this year was MakeU of T, the first and largest Major League Hacking (MLH)-affiliated makeathon in Canada. Having CPSIF allowed us to purchase many electronics components and hardware that undergraduate students would not be able to experiment with on a day-to-day basis, giving them the opportunity to transform their hardware design ideas into real products. The event was a huge success - we received more than 900 applications from not just U of T, but also other universities from both within and outside of Canada. At MakeU of T, we provided 250+ participants with a wide assortment of hardware components and equipment, workshops and mentorship from several industry-leading companies such as TELUS, Microsoft, and Twilio, as well as the creative learning environment to build a physical project of their choosing, with prizes and MLH recognition for winning teams. With this year's open-ended theme of connectivity, we saw a wide variety of projects, including IoT accessibility solutions for the physically disabled, a motion-controlled robotic arm, and even a device that helps musicians jam out with one another! Through MakeU of T and other events, we strive to provide the Skule™ community and beyond with opportunities to develop technical and professional skills, and to serve as a bridge between Skule™ and a wider community of engineering students and professionals.

With the CPSIF funding, we were able to allow students to gain technical knowledge and experience in almost all aspects of Engineering - and for the first time, every single one of our events this year has been completely free of charge to participants! This year's Hello Con Software Technology Conference hosted 150+ participants ranging from students to industry professionals to share and engage in software development knowledge. Among all the speakers lined up, Hello Con featured presentations from several industry-leading companies such as IBM, Accenture, and Interaptix, which gave participants in-depth workshops on relevant topics such as blockchain and robotics. Alongside our software conference, we also hosted NewHacks for the first time, a hackathon catered to individuals with little to no hackathon experience. With 100+ participants and representation from companies such as Daisy Intelligence, TELUS, and BlueCat, NewHacks was a valuable experience for participants to gain hands-on technical experience by working with other students to prototype a project from scratch and by interacting with and learning from industry professionals.

Overall, CPSIF is important to our club because our events simply would not happen without funding. The funding provided our club enough resources for our significant development this year: we diversified our event portfolio, built on our existing annual events to bigger scales, reached out to more students, and invited more industry professionals to mentor our students.

IEEE U of T also engaged many alumni in our events throughout the year. At NewHacks in

March 2019, Raymond Ly (EngSci 1T6), Abdul Rahman Sattar (ECE 1T0), Ragulan Sinnarajah (ECE 9T5), and Ronald Rodriguez Lira (ECE MEng 1T5) were some of the alumni who mentored participants during the hackathon. Additionally, Hello Con in January 2019 featured Interaptix founder and CEO Bardia Bina (EngSci OT0+PEY), IBM distinguished engineer and CTO Shahir Daya (ECE 9T5), and IEEE Toronto Section Chair Olivier Trescases (ECE PhD OT7) as conference speakers. Our Grad Talks series throughout the 2018 fall semester also had many alumni as speakers, including Professor Anthony Chan Carusone (EngSci 9T7), Professor Li Qian (ECE 9T3), Professor Ali Sheikholeslami (ECE MSc 9T4, ECE PhD 9T9), Professor Jason Anderson (ECE MSc 9T7, ECE PhD OT5), etc.



Participants learning how to build and debug practical circuits at the Hardware Certification Workshop

iGEM Toronto



Total Funding Awarded	\$2,100.00
MIE	\$250.00
EngSci	\$100.00
EAA	\$500.00
EngSoc	\$250.00
IBBME	\$1,000.00

The funds awarded this year were used for three main purposes:

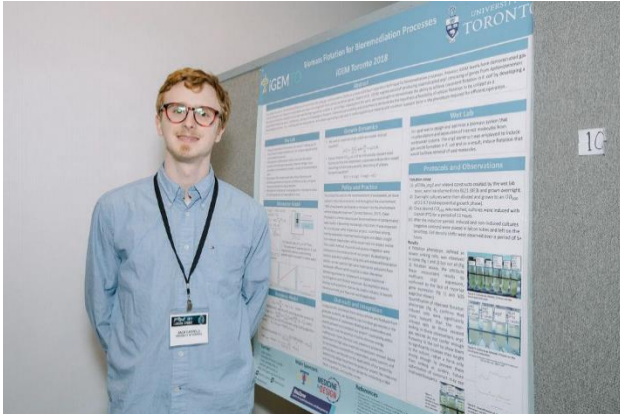
1. Registering our team for the 2019 iGEM competition, a crucial step in enabling our group's research.
2. Purchasing equipment upgrades for our laboratory, allowing us to improve the quality and efficiency of our experiments.
3. Providing refreshments during our outreach events, most notably our biweekly journal club meetings.

iGEM Toronto has always been committed to foster the development of undergraduate research initiatives through the participation of the annual iGEM Jamboree in Boston, MA. To participate in this competition, members from iGEM Toronto are responsible to design and execute a synthetic biology project during the summer and present its findings at the Jamboree annually.

Our team has represented the University of Toronto at this competition since 2007. This year, the team registration fee was \$5,000 USD, and this expense was partially supported by the funds generously awarded through CPSIF. Registering for this competition provides crucial resources to our club that support our research and allow us to share it with the public. Along with the equipment upgrades that were made, this has enabled us to offer excellent research opportunities to students from the Skule™ community, who will now spend their summer working on our new project.

iGEM Toronto is also committed to promote the importance of synthetic biology within the local U of T community. Therefore, iGEM Toronto regularly organizes and co-hosts events on campus. Most notable, we have held journal clubs for U of T students regularly since the beginning of the 2017 academic year. During these journal clubs, members from our team have chosen research articles from highly reputable journals, such as Nature, to discuss its findings with the audience and initiate discussion. We also organized a SynBio Forum in September 2018. The forum featured a panel of experts, including Genevieve Kenny from Toronto's Wastewater Treatment Plant, Patrick Diep from BioZone in the Chemical Engineering Department, and Ranvir Chaudhri, the co-founder and vice president of DIYBio. Topics discussed included the applications of synthetic biology research in the world, its potential consequences, and the scientific community's responsibility in sharing their work with the public. In addition to this, we participated in

Ontario Genomics' second annual Canadian Synthetic Biology Conference, where we presented our work, and Operation Med School's Future of Medicine conference, where we organized a workshop for high school students.



Our poster presentation at the 2nd annual Canadian Synthetic Biology Conference, held in the MaRS Discovery District auditorium. Photo credit to photographer Connie Tsang



Members of iGEM Toronto meeting with the iGEM McMaster team to share our progress and discuss ways to improve the synthetic biology community within Ontario

Indian Students' Society



INDIAN STUDENTS' SOCIETY
UNIVERSITY OF TORONTO ST. GEORGE

Total Funding Awarded	\$1,000.00
EngSoc	\$1,000.00

The CPSIF helped the Indian Students' Society's hold entertaining events for U of T students and share the Indian culture with the rest of the campus community. The funding we received helped us hold 18 events during the academic year such as the "Back to School Mixer," the "Multicultural Fair," and the "Champions Trophy Cricket Tournament."

We collaborated with the Engineering Society for the ISS presents: Back to School Mixer. During the event we used funding to serve food and buy decorations for the venue. We served Indian snacks such as samosas, chai, chat, and had a Bollywood dance tutorial. The dance tutorial was lead by the members of the Junoon U of T Bollywood dance team members. We had over 100 people come to the event. With a large portion of international Indian students going to into the engineering faculty at the University of Toronto, our club is grateful for the funding that allows us to host events that

help students feel at home with the Indian Students' Society's members and their events. This is an important gap to bridge as many South Asian students are lost when coming to a new country and starting a new school. Our events aim to make sure all students a part of the South Asian diaspora feels welcomed. The funding we receive from the CPSIF is important as it allows to keep holding events to encourage new students to come out and engage with our community within Skule™ and the Indian Students' Society.

The CPSIF helped us engage the Skule™ community by hosting a Bollywood themed event and it allowed us to share our cultural dance and food with the rest of the community.

We collaborated with the Pakistan Students Federation, Bangladeshi Students' Federation, and the University of Toronto St. George Cricket Club for a cricket tournament on October 6, 2018. In the tournament there were 6 teams consisting of 7 players each. We had over 42 players including extras and there were also some spectators. Funding made the event possible by helping us book space for our tournament in the U of T Athletic Center. In addition to that, the CPSIF funds also helped us buy medals and a trophy for the winning team. Funding helped us engage the rest of the U of T community around cricket.

On February 13, 2019 we celebrated the Indian Students' Society's 10th year anniversary. We invited our alumni, current members, and we invited the consulate general of India to speak at the event. In addition to hearing some

speeches from our guests of honour, many of our alumni got the opportunity to rekindle old friendships and meet the new members of our student organization. The funding helped us celebrate our club's history and unite past and present members of our club and provide resources for attendees.



The Bollywood dance instructor is leading a dance tutorial for the attendees



We have the club's exec team, alumni, and the Consul General of India. Rishabh Mundhra is an engineering alum who graduated in 2017 who participated in the event



The winning team in the cricket tournament is being awarded medals and a trophy

Industrial Engineering Club



Total Funding Awarded	\$7,000.00
MIE	\$7,000.00

Indy Club takes pride in its mission to elevate the Industrial Engineering Undergrad experience and the students who become a part of this team understand how important our initiatives are for shaping our community.

Funding was used in the following:

Academic: study socials hosted with TAs and professors invited to attend (money spent on food)

Social: MIE Dinner Dance, Halloween Pumpkin Smash, Mentorship socials (karaoke night, Snakes & Lattes, food tour), class socials, new common room games

Personal development: Mentorship mentor training, Therapy Animals, Wellness Kits with information on campus resources and treats

Professional development: PEY Info Session, Industry Night

For the social side, MIE Dinner Dance is a fan favourite because of how much effort and care goes into its planning and execution. Everyone who attended this year's event couldn't stop raving about the DJ and the food because we took extra care to make sure it was great this

year. On a smaller but just as important scale, our class reps continued to foster Indy's amazing culture of comradery by not only being strong liaisons between the department and their classes but by also doing small things such as bringing treats to class or hosting class socials.

On the personal development side, this year we revamped our mentorship program after several years of unsuccessful execution. All our mentors underwent training to cover what their roles were as mentors and the importance of setting boundaries and expectations early on. We were able to host several events to enable the pairings to build their relationships and we have set up a strong foundation that Indy Club can continue to build on. We also decided to host 2 wellness events this year where we were able to share campus resources for times of distress.

Finally, we introduced a new professional development initiative where we brought in Indy alumni to talk about how they leveraged their degrees and navigated through their careers. It was a fantastic night and everyone who attended took away a lot of value.

CPSIF funding from the MIE department was crucial for us because we didn't have to pick between running large events to impact as many people as possible (across all Indy) or running small events to really cater to the nuances of different groups (across individual classes). As we were able to run all the events that we wanted to, we were able to truly impact our students and show them that we are here to support each other. Most of our budget comes from CPSIF and we would not be able to operate

the same way without it.

We invited alumni back for the Industry Night to sit on our panel (Ashley Lawrence, Deep Prasad, Lauren Howe) on March 6th, 2019 and opened attendance for all to come back. They answered questions about the careers, lives, and other experiences and stayed around for an hour after the panel to socialize with the audience.

Unfortunately, we didn't get as many to sit in the audience as we had hoped but we're optimistic that as Indy Club continues to run this event, the future alumni will see its value and return as guests.



Mentorship Snakes & Lattes social



*Ashley Lawrence, Lauren Howe, Deep Prasad, and Prof.
Dionne Aleman were all*

Institute for Leadership Education in Engineering Graduate (iLead: Grad)



Total Funding Awarded	\$4,700.00
MSE	\$200.00
MIE	\$500.00
ChemEng	\$500.00
ECE	\$1,250.00
EAA	\$1,000.00
IBBME	\$1,250.00

iLead:Grad is a student-run group motivated to empower graduate students to be effective leaders of self, of organizations, and of communities. We inspire engineering students to develop their leadership skills by providing workshops and hosting speakers focused on leadership qualities. During the 2018-19 academic year, iLead:Grad has been successful—with the support of CPSIF—in organizing, facilitating, and hosting 9 leadership development workshops and events. This year, in addition to holding skill-building workshops such as ‘leadership styles’ and ‘effective communication’, we incorporated financial literacy into leadership as well as a mindfulness workshop to encourage students to develop leadership with a healthy mind. We also focussed on organizational health through

internal team building events and meetings where we identified personal and organizational values.

The annual Living Library event was successfully held in collaboration with Troost iLead for the second year on 25 February 2019. This event has continued to grow and gain popularity with the graduate students and has helped students hear first-hand accounts from alumni about how they can use their own degrees in industry. There were 17 alumni and industry professionals in attendance who engaged with over 60 students over the course of 2 hours.

The alumni and industry professionals included:

- Ali Rizvi, Flarian Inc.
- Andy Cushing, Arup
- Anna Kobb, Interface Biologics
- Babak Samareh, RBC
- Chris Twigge-Molecey, Hatch
- Colin Powell, Ernst Young
- Eman Hammad, Price Waterhouse Cooper
- Evangellos Verkis, Marks & Clerk Law
- Ian Taylor, Boston Consulting Group
- Ivo Maljevic, Telus
- Jan Chen, Baylis Medical
- Jenny Hill, TRCA
- Raymond Lo, Modar AI
- Ryan Kealey, TD Canada Trust
- Sobhan Etemadi, Sobie Systems Inc.
- Wilfred de Vega, Mitacs

iLead:Grad was also heavily involved with organizing and facilitating two ‘Mock-Speed Interviews’ sessions: one being a preparatory

workshop guided by an experienced facilitator and the other at the annual Graduate Student Career Fair at which students were able to practice their interviewing skills with actual industry representatives attending the career fair.

Without funding from CPSIF, the level of engagement and our ability to communicate leadership development to the student community would not have been possible. We are deeply grateful for the support from the departments who funded us this year.



Guest speaker (Annie Zhang, FinLitMe) engages with students and presents financial literacy for engineers

Interplanetary Space Exploration Team (ISET)



Total Funding Awarded	\$4,000.00
MIE	\$1,500.00
EngSci	\$1,000.00
EAA	\$1,000.00
EngSoc	\$200.00
YNCN	\$300.00

The Interplanetary Space Exploration Team was awarded a total amount of \$4000 from various departments within the Faculty of Applied Science and Engineering, Engineering Society and YNCN. The goal of our design team is to compete in design competitions that relate to space innovations, specifically with planets other than Earth. From the basis of our initial participation in the Project Airlock Challenge from the University of British Columbia, we decided to create a design team named U of T Project Airlock Team (later renamed to Interplanetary Space Exploration Team). Our design team has 17 active members as of May 2019 and we hope to increase our members gradually over years at U of T as interest of interplanetary innovation and research develops.

The scope of the UBC Project Airlock Design Challenge allowed us to formulate an entire design team to help us achieve our goal of winning the competition. The design challenge

is to innovate an airlock chamber with strict guidelines to be used on Mars, for easy transportation of people from a human colony to the Martian environment. There are two stages, the design phase and the prototyping phase, due May 2019 and April 2020, respectively. Both stages require our team to visit UBC in Vancouver to present our design solutions.

Our CPSIF funding is primarily utilized to allow our team, that includes undergrad students from various engineering disciplines across U of T, to ultimately compete in this competition. Our team decided to hold general recruitment events to allow for the greater U of T community, not just undergraduate engineering students, to come learn about our club and potentially join if interested. During these recruitment events, we decided to utilize approximately \$160 on a large banner. We also utilized approximately another \$150 to reimburse members of our team for team t-shirts.

Our trip to UBC will take place during the period of May 17 – 20 for phase 1, during which the team plans to spend approximately \$500 for team expenditures during the trip. The majority of the CPSIF funding, however, is saved for phase 2 (prototype phase) of the design competition. We want members of our team to have the experience of building a prototype of the airlock system which would include many hands-on work and building. To prepare the team for the prototype phase of the competition, we organized a training session for the rapid prototyping facility at Myhal, in collaboration with the facility. The rest of our CPSIF funding

will be used by the prototyping stage our next travels in May 2020. We will be starting the prototyping phase as soon as we are finished with phase 1 by the end of May 2019.

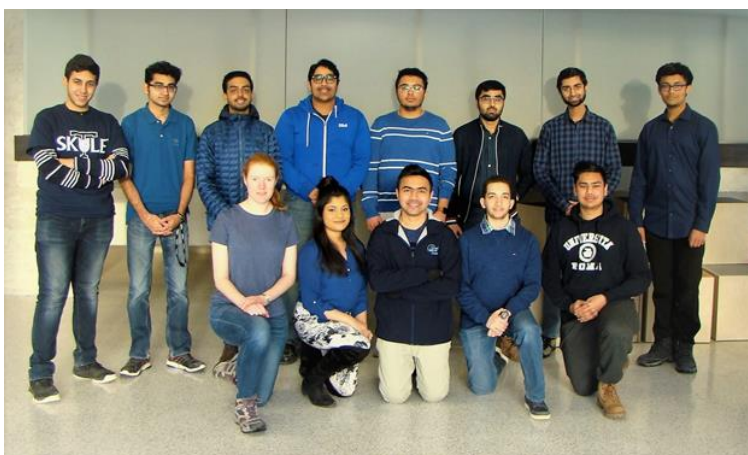
Our design team also planned to hold design review gateways for industry professionals, U of T Alumni and professors across Ontario for advice on our designs. This event would allow alumni to be involved in the work that we present in design competitions. Throughout the month of March, the team reached out to several professors and faculty through email, as well as alumni on Engineering Connect to invite them to our design review meeting. However, due to their busy schedules as the academic year was coming to an end, it was not possible to hold a meeting where all guests can attend. However, the thought of having a design review meeting, as well as planning for it would not have been possible if it was not for the CPSIF funds that we received and knowing that if a design review meeting were held we would have been able to provide snacks and refreshments for our guests.



ISSET at Club Fair



ISSET Official Apparel



Full Team Photo - March 2019 (Top Row, Left to Right – Kero Ossama, Urmil Modi, Chetanya Choudhary, Arjun Gopal, Jay Bihola, Saad Musani, Usama Ansar, Ruchir Tullu. Bottom Row, Left to Right – Gwennyth Carroll, Rupanti Matin, Safwan Hossain, Sohail Hassan, Anikeith Bankar. Absent Members: Jean Lin, Masha Stanko, Nimra Javed, Yasmin Adem. Picture Credits: Polina Yurchenko)

Let's Talk Science – University of Toronto, St. George Campus



Total Funding Awarded	\$8,600.00
MIE	\$250.00
ChemEng	\$100.00
EngSci	\$50.00
ECE	\$500.00
EAA	\$7,000.00
IBBME	\$500.00
YNCN	\$200.00

Let's Talk Science is an award-winning, national charitable organization that aims to engage children, youth, and educators in science, technology, engineering, and mathematics (STEM) through a wide variety of outreach programming. Between May 2018 and April 2019, 247 unique volunteers at the University of Toronto, St. George (UTSG) dedicated ~2600 hours of STEM outreach preparation and delivery, reaching over 4000 youth (Kindergarten – Grade 12) in the Greater Toronto Area and beyond!

The Faculty of Applied Science & Engineering (FASE) at the University of Toronto continues to be a key source of financial support for our site's programming; we are tremendously appreciative for the generous support this year from the Department of Mechanical & Industrial Engineering (\$250), Department of Chemical Engineering & Applied Chemistry (\$100),

Division of Engineering Science (\$50), Department of Electrical & Computer Engineering (\$500), Engineering Alumni Association (\$7000), Institute of Biomaterials & Biomedical Engineering (\$500), and You're Next Career Network (\$200).

Let's Talk Science initiatives across the country are offered free of charge to educators in schools, after school programs, libraries, community groups, and more. Continued support from the Faculty of Applied Science & Engineering ensures that the UTSG site can continue to offer the breadth and depth of programming developed over the past 23 years without the prohibitive costs frequently associated with STEM enrichment programs. Classroom outreach is one of the foundational pillars of the Let's Talk Science outreach program. First and foremost, funding support allows our organization to purchase consumable materials for our diverse STEM kits and reimburse volunteers for the cost of transit. One of our most popular kits is Super Science Challenges (designed for Grades 3-5 but adaptable anywhere between Grade 1 and Grade 8). Students exercise their problem-solving and teamwork skills in a series of design challenges, including egg drop, Rube Goldberg machine, and paper rotor optimization tasks. This kit needs to be continuously restocked with paper, straws, tape, string, cotton balls, plastic cups, packing peanuts, pipe cleaners, bubble wrap, paper clips, and anything else we can get our hands on at Dollarama to inspire design creativity!

The UTSG site of Let's Talk Science is widely recognized for our on-campus STEM enrichment events, including large-scale symposia (StemCellTalks, Let's Talk Cancer, and the Let's Talk Science Challenge) and departmental collaborations (e.g. Immunology on Campus, Physiology Day, Physics Day, Space Sciences Day). 2018-2019 was a particularly notable year for our site, with record-breaking attendance, exciting speakers, and new venues & partnerships. Included in this report are a few highlights, but additional details will be updated on our website throughout the summer months: <http://lts.escalator.utoronto.ca/>

On February 22nd, 2019 we hosted the milestone 10th Annual StemCellTalks Symposium at a brand new venue: the Myhal Centre for Engineering Innovation & Entrepreneurship (Lee & Margaret Lau Auditorium) – special thanks to the Department of Chemical Engineering & Applied Chemistry for the additional support with booking. The theme of this year's symposium was retinal-specific stem cells and macular blindness, inviting lively debates and discussion about the future of stem cell research and autologous vs. allogeneic sources of stem cells for therapeutic use. This year's event accommodated a record-breaking 239 high school students from 15 schools across the GTA (>60% growth from 2017-2018). Featured speakers, debaters, and panelists included Dr. Brian Ballios (MD/PhD alumnus, previously co-supervised by Dr. Molly Shoichet), Dr. Sarah Wassmer (Venture Associate at CCRM), and Dr. Rohin Iyer (Development Manager at GE Healthcare, IBBME alumnus). Our event was covered in Signals by Eleni Kavanis of CCRM:

<https://www.signalsblog.ca/retinal-degenerative-diseases-theme-of-stemcelltalks-2019/>. CPSIF support helped to cover costs associated with venue booking, catering, participant workbooks, and speaker recognition. As in previous years, many of our StemCellTalks volunteers were current FASE graduate students!

The 4th Annual Let's Talk Cancer Symposium took place on March 22nd, 2019 in the Great Hall at Hart House. This year's event focused on the 'hallmarks of cancer' and culminated in an immersive escape room that challenged over 160 students in Grades 10-12 to apply everything they learned throughout the day. The winners of the escape room were treated to lab tours at the Medical Sciences Building & Spatio-temporal Targeting and Amplification of Radiation Response (STTARR) facilities. This event saw immense growth as well, with a >50% increase in attendance compared to 2018-2019! CPSIF support helped support venue, catering, activity development, and speaker recognition costs.

Our annual Let's Talk Science Challenge for Grades 6-8 was also held at Hart House this year. On May 6th, 2019, 98 students in teams of 3-4 put their STEM knowledge and problem-solving skills to the test in what is now a Canada-wide event! The day is divided into a 'quiz show' in the morning and an 'engineering design challenge' in the afternoon, with a cumulative score determining the top 3 teams. The highly coveted 1st place prize includes 4 reserved spots for the Jr. DEEP Summer Program, affording these bright students an opportunity to explore engineering first hand. This year's keynote speakers were Dr. Zachary

Kroeze (Postdoctoral Fellow & ECE alumnus) and Dr. Renée Hložek (Professor, Dunlap Institute for Astronomy & Astrophysics). Yet another highlight of this year's event was our lunch hour Fun House where research groups from across the University of Toronto shared their research in engaging and accessible ways. The Fun House is an excellent opportunity for FASE students and staff to engage in outreach with a younger demographic. This year's booths included representation from the labs of Dr. Gisele Azimi (CEAC & U of T alumna) – creating customized keychains using copper electroplating – and Dr. Adam Steinberg (IAS & U of T alumnus) – measuring the thickness of a hair using laser diffraction. CPSIF funding supported costs associated with venue, catering, and activity supplies.

Indigenous outreach through Let's Talk Science at UTSG maintains a strong collaborative relationship with the Sandy Lake First Nation, an Oji-Cree community in Northern Ontario. During the most recent visit in August of 2018, our volunteers worked with ~100 youth (5-16 years old) covering topics ranging from wellness, physical activity, nutrition, anatomy, and ecology. Planning is currently underway for the 2019 annual visit in partnership with the Sandy Lake Health and Diabetes Project.

We continue to increase the scope of our outreach initiatives with departmental collaborations. In addition to our portfolio of events from 2017-2018 (Physiology Day, Physics Day, & Pharmaceutical Sciences Day), our team organized two brand new events for 2018-2019: Immunology on Campus (Department of Immunology) & Space Sciences

Day (Department of Astronomy & Astrophysics)! Immunology on Campus took place on April 26th, 2019, welcoming 46 students from 23 different GTA schools to explore the field of immunology through a series of short presentations and hands-on activities. Student feedback was overwhelmingly positive, and we hope to expand this initiative in 2019-2020. Space Sciences Day is scheduled to take place on May 27th, 2019. Grades 9-10 students have been invited to participate in activities focusing on asteroids and satellites, our moon, and space travel. The day will finish with a space-themed escape room, complete with virtual reality. CPSIF funding has played an essential role in helping to develop these new events and we are eager to explore the possibility of collaborating with FASE departments in the future.

On behalf of the volunteers, educators, and youth involved with Let's Talk Science this year, we would like to express our deepest gratitude and appreciation to FASE and all of the departments that supported our organization through CPSIF. The on-going support has played a crucial role in helping us to expand the scope of our program, increase volunteer and educator involvement, and continue to offer free STEM programming to youth across the GTA. Thank you for helping us inspire the next generation!

Materials Industry Club



Total Funding Awarded	\$2,100.00
MSE	\$1,500.00
EAA	\$500.00
YNCN	\$100.00

The Materials Industry Club connects students with materials professionals and societies. As a Materials Advantage, MetSoc and ECS chapter, we help students build relationships with the materials industry. In addition to representing these professional materials societies, Materials Industry Club also offer professional development events and mentorship.

Our biggest professional development every year is our Speed Interviews event. Alumni and industry professionals are invited to campus for one night to conduct mock interviews with students and give them feedback on their interview performance. This allows professionals to improve their interviewing skills as well as helps students prepare for their PEY or post-graduate job hunt. Funding is essential to making this event happen. It helps us cater the event for volunteers who would otherwise be heading home after a full workday and pay for administration of the event. We really love seeing engineering alumni come back to show us what they've been doing after graduation, as the materials industry is relatively small and niche.

Funding also helps students attend industry and networking events in the GTA. ASM Ontario organized multiple networking events this year, one of which included a silversmithing workshop. Students are able to attend these events more easily without breaking their wallet by subsidizing ticket costs and transportation costs. Funding also helps students attend exploratory events such as research showcases, industry showcases and workshops by supplying snacks and refreshments. These exploratory events are really helpful for first and second year students to gain exposure to materials industry early on in their career. Funding also helps upper year students attend conferences through travel subsidies.

We would like to thank the Department of Materials Science & Engineering, the Engineering Alumni Association and the You're Next Career Network for making this year possible and connecting students with the materials industry. Thank you for helping students find their footing in the materials industry and better understand their impact on the world.



Daniel Choi (MSE 2T2) on right receiving feedback at Speed Interviews Networking Event

Materials Science and Engineering (MSE) Club



Total Funding Awarded	\$4,682.55
MSE	\$2,600.00
EngSoc	\$2,082.55

The Materials Science and Engineering Club (MSE Club) is extremely grateful for the funding it received this year. The club received \$2,600 from the Department of Materials Science and Engineering and another \$2,082.55 from the Engineering Society. This funding was used by the club to finance several academic, social, and professional development events that truly enhanced the student experience of the MSE undergraduate students.

The MSE Club began the year with a vibrant event for the incoming class of MSE undergraduate students during orientation week, where the activities included games for the incoming students to get to know each other and socializing with upper year students to learn about the courses and what to expect as a first-year student. The club proceeded to host more events such as mentorship events that connected first and second year student mentees with third and fourth year student mentors, a book smoker to facilitate the sale of used textbooks between MSE students, a PEY Panel where students who were currently on PEY or who had completed a PEY answered questions from students seeking a PEY job, and

some more social events such as Secret Santa, Halloween pumpkin carving, Coffee House, Iron Ring parties, and more. Funding was used in these events primarily for providing snacks and refreshments to attendees and purchasing any necessary supplies.

Most of the funding the MSE Club received went towards Buckyball, the MSE Club's annual dinner dance. Funds were used to subsidize ticket prices to make the event more affordable and increase the number of students who attend. This year, we hosted the event at the Eglinton Grand and sold 109 tickets, 18 of which were purchased by the department for professors and TAs. The Dinner Dance consisted of an opening monologue with a game of jeopardy, awards, a three-course meal, an open bar, and dancing. Transportation was also provided, along with music by a jazz band and a DJ.

Without the generous funding that the MSE Club receives annually, the club's accomplishments would be far less impressive and the Skule™ spirit within the department would be diminished. We would like to express our thanks again to the generous donors who make these events possible.



MSE Dinner Dance

Materials Science and Engineering Graduate Student Association (MSEGSA)

Total Funding Awarded	\$3,300.00
MSE	\$3,300.00

The Materials Science & Engineering Graduate Student Association (MSEGSA) received a total of \$ 3300 for the 2018-19 academic year.

Funding was used to contribute to both social and professional events. Events include: Impact Speaker series (3 total), Halloween pumpkin carving, ping pong tournament, ski-trip in partnership with GECoS (Graduate Engineering Council of Students), Student-Faculty mixer, Interdepartmental Movie Night with Chemical Engineering, Friday coffee breaks, and Christmas lunch. Upcoming events being planned: two summer BBQs, a Blue Jays game. Initiatives such as common room snacks during the winter exam period were also implemented to reduce graduate student stress.

described in a paper by Nature, graduate students are more susceptible to depression relative to the general population. Our social events aim to reduce student isolation, help alleviate the depression and anxiety that besets graduate school, while promoting a sense of community. The funding received by CPSIF was essential for running our events and expanding the social horizon for graduate students at MSE beyond their research groups and even outside the department.

Alumni engagement occurred through Kendra Hunter and Susset Perez during our Impact

Speaker series. We had three alumni visit and refreshments were provided for the MSE graduate students. Once again, CPSIF provided the funds necessary to increase the incentive to attend such events (75+% attendance roughly). Impact Series talks were held in September, November, and April.



MSEGSA Christmas Lunch 2018



MSEGSA Halloween 2018

Mechanical Engineering Club



Total Funding Awarded	\$10,500.00
MIE	\$10,500.00

The Mechanical Engineering Club is extremely grateful for the funding support from the departments and organizations associated with the Faculty of Applied Science and Engineering. Each year, the funding is essential in running many of the larger events that allow us to create the social, professional, and academic initiatives to help enhance students' experiences of university. The club received \$10, 500 this year. The main events throughout the year are:

MIE Dinner Dance

This year MIE's annual dinner dance hosted over 400 attendees including faculty, a buffet dinner followed by reception. Taking place in November, the event started the year on a positive note, allowing everyone to mix and mingle and relax before the school year starts to get busy. Mech and Indy Club Chairs made a short speech about the importance of maintaining a sense of community within your classmates and how the clubs are here to support you. The social aspect of attending students is incredibly important in supporting each other for success and to have a great de-stressor.

Mechanical Engineering Mentorship

The Mentorship program has been overhauled, enabling many events to be run throughout the year. Many first-year students find it difficult to reach out to upper years as they feel like they don't have anyone to reach out to. With this program, we provide students with all of the contacts they need in order to succeed within the university in a multitude of different ways.



Mech Club Executives at MIE Dinner Dance, (Student Names from left to right: Kevin Nguyen, Hannah Eng, Christine Yaromich, Marie Floryan, Catherine Kucaba, Nicholas Petrelli, Chloe Ortios, Karen Zhang, Chandula Jay, Chris Tong, Alaa Hotum)

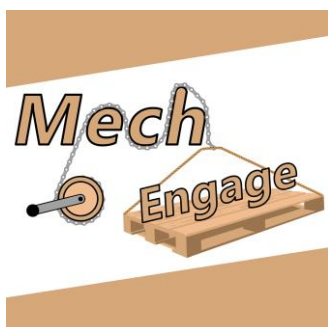
MIE Coffee House

This year we had a very large turn out on coffee house which highlighted many student talents including, singing, dancing, instrument playing and comedy. This is a great event where we can support the talents of our fellow students and to take time to destress and enjoy the acts.

These events would not have been possible without the generous support of the departments and organizations involved with the Centralized Process for Student Initiative Funding. The funding helped cover the expenses associated with venues, catering, merchandise, and maintenance and upkeep of student spaces.

On behalf of the Mechanical Engineering Club and the entire student body, we would like to thank everyone for their support in helping us create the best possible undergraduate experience for the Mechanical Engineering students.

MechEngage



Total Funding Awarded	\$950.00
MIE	\$700.00
EngSci	\$50.00
EAA	\$100.00
EngSoc	\$100.00

The 2018-2019 year was a strong year for MechEngage. The club was awarded a total of \$950 for the fiscal year. At MechEngage, our purpose is to provide undergraduate engineering students with valuable skills and experience through our technical skill workshops, with which they will be able to obtain meaningful internships in their engineering careers. Here's a look at what we did this year:

MechEngage Arduino Workshop

Using the success of last year's initial Arduino Workshop as a stepping stone, we took this year's Workshops a step further and ran one each semester. Students learned how to use micro-controllers to interface with electric circuits, which our 1st year EngSci participants seemed to enjoy. We hope the experience assists them in their AER201 projects in 2nd year, as well as any engineering students looking to pursue a career in Mechatronics!

MechEngage Solidworks Workshop Series

At the MechEngage Solidworks Workshops, students have the opportunity to take part in either a Basic or Advanced Workshop, depending on their level of skill in the use of Computer-Aided Design (CAD). Once again this year, many Mechanical Engineering and Engineering Science students registered for the Solidworks Workshop Series, where they learned to model 3D parts and assemblies, complex geometries and surfaces, draw up plans for machining and 3D printing, and conduct Finite Element Analysis. We hope they can put these new skills to use in their future design projects, such as Capstone Design or as part of a large-scale endeavor with a design team!

The funding awarded to MechEngage this year was integral in allowing us to host our technical workshops. Students greatly enjoyed and benefited from our workshops, whether it was learning the fundamentals of Computer-Aided Design in our Solidworks Workshop Series, or by coding micro-controllers to power motors and force transducers in our Arduino Workshop. None of this would have been possible without the support of the MIE Department, EAA, EngSoc or the Division of EngSci. We greatly appreciate their contributions towards the events we ran this year and hope we can make an even bigger splash next year!



A team of 1st years work furiously to debug their breadboards and Arduino code during our 2019 Arduino



2 Mechanical Engineering students on PEY take some time off to test out our stock of ultra-sonic sensors

Mineral Engineering Club

Total Funding Awarded	\$1,500.00
Civ & Min	\$1,000.00
EAA	\$500.00

The Mineral Engineering Club (MIN Club) was awarded \$1,000 from the Civil and Mineral Engineering Department and \$500 from the Engineering Alumni Association.

The funds were used on the following:

- Mineral Engineering alumni outreach
- Student socials: CIV/MIN Dinner Dance, Iron Ring Ceremony
- Mine Rescue Funding
- Industry outreach (PDAC & CIM Lunches)

Students at the Lassonde Mineral Engineering program, while attending to one of countries rigorous academic institutions, not only gain outstanding educational experience but also social and professional one. The MIN Club was able to organize and subsidize the events previously mentioned; the club had alumni come to the Mining Building to share with students their experience in the industry. Also, PDAC registration fee was subsidized for students. PDAC is the largest mining conference in the world held in Toronto every year. This is a great opportunity for students to network with many industry professional; students got internship and full-time positions from this event in the past.

Moreover, a portion of the funds were used for Mine Rescue Training which, brings in the Ontario Mine Rescue team to the University of Toronto every semester to train a total of 15

students. This is a five-day, 40-hour, hands-on, competency-based program that introduces participants to the fundamental principles of mine rescue, and standard mine rescue procedures and equipment. The training is beneficial for the student, because of the knowledge and skill sets they gain regarding operational health and safety, but also it advantageous when looking for job opportunities as employees.

Student social events such as the CIV/MIN Dinner Dance, the MIN Dinner, and the Iron Ring Ceremony were partially subsidized for students. These are great opportunity for students from Civil and Mineral Engineering programs as well as for faculty staff to connect and share outside the classroom. Social events are great opportunity to build and reinforce friendships, but also occasions to destress from academic life.



Mine Rescue Training

National Society for Black Engineers (NSBE)



Total Funding Awarded	\$4,525.00
MSE	\$50.00
MIE	\$300.00
ChemEng	\$750.00
Civ & Min	\$300.00
EngSci	\$75.00
ECE	\$700.00
EAA	\$1,000.00
EngSoc	\$1,000.00
YNCN	\$350.00

The National Society for Black Engineers (NSBE) U of T Chapter received a total of \$4,525 from the Centralized Process for Student Initiative Funding. This funding was used to finance numerous initiatives that NSBE had planned for the year, such as the Annual High School Conference, the NSBE Hacks U of T and the Meet a mentor program.

High School Conference

Annually, we host a High School Conference in which over 50 students are invited to engage in a series of engineering design competitions and workshops. This workshop will educate students about engineering innovations and how engineering plays a major role in their daily life in order to increase their enthusiasm about a positive attitude towards academic excellence. This will give students the opportunity to

develop and put into practice their academic, technical and leadership skills.

NSBE Hacks U of T

On January 26, 2019, our chapter hosted the first university student-run black hackathon in the GTA which was sponsored by the likes of Google, Shopify, Bloomberg, IBM, University of Toronto Entrepreneurship and McAfee. It was a 12-hour fun-filled hackathon with over a 100 students from various Universities across the GTA and our mission for the hackathon was to help equal the footing for black students within Canada by placing them in a comfortable environment where they're allowed to be creative and innovative, and also affording them opportunities for personal and career development through the help of our trusted partners, workshops and mentors.

Meet a Mentor

We also had an alumni mentorship event where, using our NSBE alumni database, black students were able to talk to alumni professionals who can give them tips to ace an interview, review their resumes and make further mentorship connections.



High School Conference



Sponsors, winners, and participants from NSBE Hacks



Alumni professionals and students interact

Neurotech U of T



Total Funding Awarded	\$1,362.80
MIE	\$50.00
EngSci	\$50.00
ECE	\$350.00
EAA	\$200.00
EngSoc	\$100.00
IBBME	\$512.80
YNCN	\$100.00

Neurotech U of T drives undergraduate neurotechnology innovation through projects, workshops, and events driving interdisciplinary innovation. Funding obtained from the Faculty of Applied Sciences and Engineering was crucial for us to innovate in neurotech. \$61 was used to provide refreshments for our Cortical Apps Ideation Session, where we connected engineering students with students of other disciplines to generate neurotechnology startup ideas. Refreshments and other event fees adding up to \$181 gave engineering and other students the opportunity to learn from and network with world-renowned researchers in the field of neurotech and BME. \$60 provided allowed our research team to start mechanical and electrical prototyping for an open-source brain wave headset, and an additional \$100 provided will empower the team to create a minimum viable product. We are investing

\$606.32 to create a biomechanical engineering team at Neurotech U of T this summer to design a mind-controlled drone and a mind-controlled prosthetic arm.

The Faculty of Applied Science and Engineering empowered Neurotech U of T to help students in engineering and other disciplines obtain skills required for neurotech innovation. Neurotech U of T's Intro to Neurotech workshops gave forty-five students of various disciplines training in brain-computer interface development and insight as to how their discipline can be applied to neurotech. The experience of creating a real-time artistic representation of their brain in the workshops was crucial to one student obtaining a neurotech research position, and empowered others to start their own BME projects. Skills learned from participation in Neurotech U of T competition projects and workshop design were differentiators for six students and one recent engineering alumni to obtain neurotech, BME, and EE research positions at the Krembil Neuroscience Institute, InteraXon, a company founded by U of T engineering alumni, and Myant, a biotech and smart textiles company in Toronto. In addition, a project that stemmed from the 2017-2018 cohort of our Cortical Apps Project Incubator was accepted into the U of T Hatchery program this summer for commercialization efforts.

Most importantly, the funding provided powered activities that strengthened a community made of many disciplines, from many engineering sub-disciplines to philosophy of mind. These interactions gave students not in engineering exposure to the discipline and introduced

engineering students to new problems that they can apply the engineering methodology to. In our weekly HackTernoon prototyping and ideation sessions, engineering students designed projects with neuroscience, physics, and cognitive science students. Our Connexion networking event let engineering and other students interact face-to-face with world-class researchers and learn from their insights. The funding provided allowed Neurotech U of T to foster a community where anyone, regardless of discipline or expertise, felt comfortable learning and innovating, which contributed both to the Skule™ community spirit and the innovative spirit of U of T.

Funds from the Faculty of Applied Science and Engineering allowed the Neurotech U of T project team to create Neurostack, an open-source API for brain wave analysis on the cloud. This API is being used for the development of MindType, Neurotech U of T's mind-controlled keyboard, and for WallIEEG, a biomechanical engineering research effort designing mind-controlled drones, prosthetic arms, and quidditch-playing robots. We submitted Neurostack to the international NeurotechX Student Clubs Competition and are awaiting results. These funds will also play a crucial role in the finalization of Neurotech U of T's open-source EEG headset this summer, which will allow us to collect and analyze electric data from eight more regions in the brain than we are currently able to measure from. In addition, the funding helps us create a safe, welcoming environment where any student can participate in biomedical engineering, which strengthens U

of T's innovation community and ensures talent participation in our projects.

The sources of our funding included the Department of Electrical and Computer Engineering, Engineering Society, Engineering Alumni Association/Dean's Office, Department of Engineering Science, Institute of Biomaterials and Biomedical Engineering, Department of Mechanical and Industrial Engineering as well as Your Next Career Network.

Our club has captured the interest of engineering alumni. Two students currently completing their M.A.Sc at IBBME have been central in our effort to create Neurostack, an open-source cloud EEG analysis API. Their participation in the project helped them realize an industrial application of neurotechnology. Two alumni students from the MIE were dedicated participants in our Intro to Neurotech workshop series which took place on Monday nights weekly in the winter semester. Both attended every workshop, learned the fundamentals of brain-computer interface engineering, and inspired undergraduate students to combine arts, sciences, and engineering. Additionally, an ECE alumnus and one of our workshop leads, designed the digital signal processing curriculum and content for our workshop series. Two students from Neurotech U of T, one being an ECE alumnus, used skills developed in competition team leadership to secure internships and full-time positions at InteraXon, a start-up founded by U of T engineering alumni. InteraXon's contribution of access to their flagship product, the Muse EEG headband, has been central to our efforts in

creating MindType, a consumer mind-controlled keyboard.

Furthermore, Dr. Joyce Poon spoke to engineering and arts/sciences students at our networking event, Connexion, on November 26, 2018 5-7pm. She shared her work in using engineering methodologies to design the technology powering optogenetics techniques widely used in experimental neuroscience. Her presentation and networking gave engineering students an example of how engineering techniques can be used to solve interdisciplinary problems and gave neuroscience students and other researchers present an understanding about the engineering effort that enables a core technique used in neuroscience.

NSight Mentorship Program



Total Funding Awarded	\$1,300.00
EngSci	\$800.00
EAA	\$500.00

Inspired by developing a culture of personal and professional growth within the Engineering Science (EngSci) community, NSight aims to engage first-year Engineering Science students with upper-year students. The mentors provide experience, guidance and encouragement to their mentees with the opportunity to develop knowledge, networks and skills sets required to succeed in engineering. Given the difficulty of transitioning from high school to university, NSight extends a helping hand to first years through invaluable mentorship. The reciprocal benefits for mentors who invest their time gain several intangible benefits from leadership development to gaining exposure to new perspectives, ideas and approaches. NSight strives to ensure that every mentoring relationship made is built on communication, mutual trust, respect and involves both parties to exchange ideas regularly for further development.

This year, our club received funding from the Division of Engineering Science and the Engineering Alumni Association, which helped us run numerous events throughout the year, as well as revamp our club's promotional material.

The most notable events were the mentor-mentee mixer to kick off the year, a series of 8 option talks discussing each EngSci major, and the culminating "Should I stay, or should I go" event. The mentor-mentee mixer served as the initial meeting between our upper-year mentors and our new first-year members, where our funding was used to cater the event as well as cover the cost of icebreaker supplies. Next, the series of option talks enlisting bringing 2 speakers to represent each of the EngSci majors (i.e. Aerospace, Machine Intelligence, Energy Systems, etc.), so that first- and second-year students could develop a better understanding of what each option entails, while also being able to ask questions to students who have travelled along the same journey. Our funding was used to present each speaker with a token of our appreciation for their time and insight. The final event of the year was intended to give first-year students the opportunity to understand the main differences between staying in EngSci and moving to another program from the perspective of upper-year students who have either stayed in EngSci or not. This event was also fully catered as a result of the funding we received.

Regarding revamping our promotional material, we commenced the first phase of our overhaul by contracting a graphic design company to create a brand-new logo for the NSight Mentorship Program.

Ontario Water Works Association - U of T Student Chapter



Total Funding Awarded	\$700.00
Civ & Min	\$150.00
EngSci	\$50.00
EAA	\$250.00
EngSoc	\$250.00

The Ontario Water Works Association Student Chapter at the University of Toronto (U of T OWWA-SC) would like to thank all of the Departments listed in Table 1 for supporting our events during the 2018-2019 school year. For the past year, our club has worked to provide the Skule™ community with opportunities to learn more about the water industry, to explore global water issues, and to build their technical knowledge and leadership skills while networking with industry professionals. The events we have held to meet this goal, including speaker seminars, networking sessions, and a movie screening as a part of the Water Docs Film Festival, would not have been possible without the generous support provided through the centralized process for student initiative funding.

The U of T OWWA-SC hosted monthly seminars to raise awareness about critical water issues and promote exposure to advanced scientific issues. These seminars provided an opportunity for like-minded students to network with each

other and leading industry professionals. Seminar topics included just one road map of a career in the water industry : 20+ years' experience with Reg Russwurm, Vice-President OWWA; the distribution trifecta: measurements and impacts on drinking water led by Laura Mateer, water quality analyst York Region; EPA's small water system webinar series; water and sanitation in disaster response by Dr. Ray Cantwell, process engineer at Jacobs and U of T alumnus; water consulting 101with Associated Engineering led by Elia Edwards, Sarah Larlee and Dr. Anna Comerton. During our March 29th, 2019 seminar we were joined by representatives from R. V. Anderson Associated Limited (RVA), including U of T alumni Appana Lok and Kim Sayers, who discussed their respective career paths in the water/wastewater consulting industry as well as the hiring process and what they look for in candidates. Funding from the Faculty of Engineering and Applied Science allowed us to bring in researchers, professionals, and activists leading their respective fields and to turn our events into Lunch-and- Learn sessions which fit well into the busy schedules of our student members.

On November 15th, 2018 the U of T OWWA-SC partnered with the OWWA Young Professionals Committee, the Water Environment Association of Ontario University of Toronto Student Chapter, Water Environment Association of Ontario Ryerson University Student Chapter and the Canadian International Erosion Control Association to host a networking and water trivia night. Thanks to the funding we received, we were able to secure a venue large enough for the

nearly 40 students and professionals who attended and provide food for them all.

On March 20th, 2019, the U of T OWWA-SC was able to offer students a free screening of four documentaries through our partnership with Ecologos and the Water Docs Film festival: Water 1, For the Love of Salmon, The Radicals, and the World premiere of Gracie. Each of these films was chosen to challenge perceptions of water in the Skule™ community as well as the Toronto community more broadly, sparking meaningful and lasting conversations about lesser known global water issues. The funding which went towards the rental of audio/visual equipment helped make this our most popular event with hundreds of people in attendance.

Once again, we would like to thank each of the Departments that supported the U of T OWWA-SC this year; moreover, we would like to thank all the alumni whose participation was integral to the success our events. From the 2018-2019 U of T OWWA-SC and all its members, we look forward to working with the Faculty of Applied Science and Engineering again in the upcoming year to serve the vibrant Skule™ community.



Audience at Laura Mateer's seminar on the water distribution



Gathering at the Water Trivia Night

Robotics for Space Exploration (RSX)



Total Funding Awarded	\$8,000.00
MIE	\$1,000.00
EngSci	\$1,000.00
ECE	\$3,500.00
EAA	\$1,250.00
EngSoc	\$500.00
YNCN	\$750.00

Robotics for Space Exploration (RSX) would like to thank our generous sponsors for funding our initiatives. Over the past year, we strived for and achieved our goals in fostering engineering, science and soft skills in students to further their growth as future engineers. This year, RSX was able to drive many student-led projects, impacting many parts of the Skule™ community. We designed and built a specialized Mars rover to compete at the European Rover challenge in Poland, competing against university teams from around the world and placing third. We experimented with new technologies and solutions to collecting surface samples, autonomous navigation with stereo cameras and machine learning, and refined our techniques of human-interfacing with a six degree of freedom robotic arm which we built. We hosted SEEK (Space Exploration & Engineering Kompetition) and SEEK Jr., all-day hackathons to get university and high-school

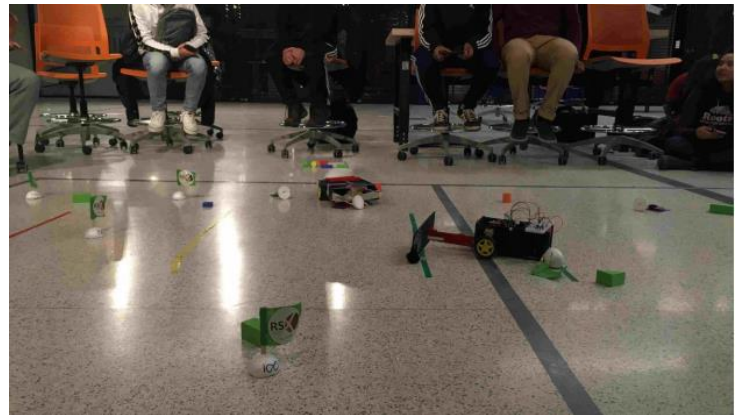
students interested in space robotics. We continued our participation in the three-year Project Airlock design challenge, the CanSat competition and several other initiatives. The funding we received through the CPSIF program has been a tremendous help in supporting our projects and outreach.

The funding we received has helped us to cover the costs of project and outreach materials, the logistics of international competitions, and many other costs which keep the club running. We are extremely proud to have engaged over 100 alumni, including the founding members of RSX, through events including the Engineering Science Alumni Dinner and the Machine Intelligence Bootcamp, where we demonstrated our rover.

We would like to thank the Department of Material Science and Engineering, the Department of Mechanical and Industrial Engineering, the Division of Engineering Science, the Department of Electrical and Computer Engineering, the Engineering Alumni Association, EngSoc, and the Your Next Career Network for their generous support in all our endeavors.



Left to Right: Hudson, Abhishek, Victor, Chris, Richard, Paul



Robots built by high-school students compete in SEEK Jr.



Judges and volunteers of the European Rover Challenge pose with rovers. RSX rover pictured third from left

SettleIn



Total Funding Awarded	\$750.00
EAA	\$300.00
EngSoc	\$200.00
YNCN	\$250.00

The Year in Summary

SettleIn is a non-profit that aims to help students succeed in the city of Toronto via one-on-one career mentorship and orientation services. All revenue we raise through our service is donated to refugee families in Canada. SettleIn has had the most successful year yet. We have managed to increase our executive team from 4 students last year to 10 this year. We have increased our membership base by approximately 75 students and have added 10 new alumni to our database for future matching.

This year we have hosted 5 events, mentored over 30 students, and engaged over 20 graduates. The funding from CIPSIF has been used in 5 major events: a PEY info session, a resume workshop, a cover letter workshop, and 2 networking info sessions. Each event hosted had at least 40 students and 5 alumni in attendance from both engineering and non-engineering faculties. We have also secured a referral only job from Bell for a summer internship which was shared with our members, one of which accepted the job offer. Apart from

that, we have managed to make our members more hireable to employers via our career mentorship. So far we have confirmed that at least 10 students have received a job offer after going through our service.

Utilization of Funds

Funds were used to improve the experience of the students and guests. Funds were used on food, drinks, and gifts for those in attendance. We have also used funds to help facilitate and improve the experience at pop-up booths around campus. We have greatly benefited in having the funds as they allowed us to better advertise events and get to interact with more students.

Testimonials

We have received multiple positive responses from our students that we've helped secure an internship position. We chose the most relevant ones for the Impact Statement.

1. "Before SettleIn, I was very worried about having little experience in the work field and how it would affect my chances of landing a PEY position. When I reached out to SettleIn, I worked with a mentor who not only helped cater my resume for relevant job positions and prepare me for interviews but also taught me the importance of networking" - Aninda Poddar
2. "They worked hard to understand my situation, goals, and strengths to decide what would work best for me. They are honest yet encouraging when it comes providing quality resume, cover letter, and interview advice." - Nathan Ling

Engaging Alumni

Many of the events we run feature U of T and U of T Engineering Alumni to give students advice and perspective from people that relate to the challenges these students face nowadays. Our Alumni, who we consider as guests and mentors in the events we hold, are always out to give students a helping hand and network with them outside of events we hold. Moreover, our Career Mentorship Service comprises of a U of T Alumnus sitting down with a current student where they sit down and work on their resume, cover letter, and interview skills. Every year, we engage over 30 U of T Alumni to work with students on a range of professional skills.



You vs PEY panelists



Skule™ Arts Festival



Total Funding Awarded	\$1,050.00
MSE	\$50.00
MIE	\$50.00
Civ & Min	\$50.00
EngSci	\$50.00
ECE	\$50.00
EAA	\$100.00
EngSoc	\$700.00

Skule™ Arts Festival is extremely grateful for the funding from the Faculty of Applied Science & Engineering this school year.

This funding was crucial in allowing us to expand our club and work towards a wider positive impact on the U of T Engineering Community. We run workshops, events, and installations of all varieties of fine art, with a mission to celebrate artistic talent and creativity within the community. We provide instruction and materials, so that anyone who wants to participate may do so without cost. We wish to emphasize that art can be enjoyed – both by creating and by viewing – by everybody. We want to foster an environment that is relaxing and supportive of all skill levels.

This year the funding made it possible for us to hold 1.5 times the number of events we held the previous year. One of the most popular events was our Pumpkin Decorating Workshop,

hosted in October in the Sandford Fleming Atrium, a new idea that was very successful. We provided a variety of mini pumpkins and gourds along with paint and crafting supplies, and the attendees were able to have fun decorating their pumpkins and gourds in any way they wanted, taking them home at the end of the day as a quirky décor. We take great pride in hearing that our events provide our members with a well-deserved mental break from their structured and logical engineering work and letting them try something they would not do otherwise in their own time.

The most successful event this year was the coffeehouse that served as a kick-off for our Festival Week at the end of January. This event celebrates the performing arts, giving members of the community the opportunity to perform music or dance in front of a supportive audience of their peers. The funding we received was put towards renting a keyboard and sound equipment in order to run a high-quality event. We also purchased coffee, tea, and snacks for the audience as an added incentive to the casual café atmosphere that is the objective of our coffeehouse events.

Skule™ Arts Festival provides a place for people who enjoy creating art to find others with similar interests, and receive recognition for their talents. We host a variety of events based on the interest, and we encourage our members to become event leaders and host their own workshops. We run both traditional art workshops (such as watercolour painting and life drawing), as well as more crafty activities. We also put up large-scale art installations in the Sandford Fleming Atrium for all to enjoy,

and professionally mounted all the drawings and paintings submitted from the community for display in our Static Art Exhibition. None of this would be possible without the funding provided to us by the CPSIF, which helps us provide joy to the U of T Engineering community.



Some of our members in the process of decorating their pumpkins/gourds



A selection of the finished masterpieces from our Pumpkin Decorating Workshop



Many people came to enjoy the music and warm drinks at our Coffeehouse as an escape from midterms and the severe weather that caused classes to be cancelled that evening

Skule™ Badminton Club



Total Funding Awarded	\$1,100.00
EAA	\$500.00
EngSoc	\$600.00

Skule™ Badminton Club (SBC) received a total of \$1,100 funding for the 2018-2019 academic year. The funding received through the Engineering Society and Engineering Alumni Association was used to buy new equipment for club members to borrow, to book badminton courts to hold tournaments, as well as open playing sessions at the Chinese Presbyterian Church (5-minute walk from campus). SBC is pleased to be able to offer bi-weekly court hours on weekends to University of Toronto Engineering students as well as other students within the University of Toronto with the help of the funding provided. These regular court hours allow students to take a healthy and well-needed break from school work, and it also serves as a place to socialize and get to know people with similar interests.

We also organized 4 tournaments throughout the year for our members where they came out, showed off their skills, enjoyed some friendly competition and won some cool prizes. Since tournaments were open to all University of

Toronto students, people from different years and programs were able to meet and network from areas ranging from undergraduate health sciences, to engineering graduate students. During these events, there are often many frosh that show interest in potential leadership positions within the club thus it is also a great way to get to know the inside of a club.

The funding SBC received from the Engineering Society and Engineering Alumni Association is extremely important to us, because unlike some meeting rooms, badminton courts are not free to book, therefore, the funding is used to cover some of that cost. This funding also helps SBC to organize activities for our club members like the General Meetings we have twice a year. SBC has members ranging from undergraduates to PhD students, to alumni. Through the shared interest in badminton, members are able to interact with other students from different years and faculties.



Winners and Second places of the Winter Mixed Tournament along with one of the Presidents

Skule™ Choir



Total Funding Awarded	\$1,450.00
MIE	\$200.00
Civ & Min	\$200.00
EngSci	\$50.00
ECE	\$250.00
EAA	\$250.00
EngSoc	\$500.00

Skule™ Choir is very grateful for the support of the departments who contributed through the CPSIF. This was our club's third year and this support is especially important to us as a young club. This year's funding allowed us to buy more music, which was particularly for our performances at both our spring concerts,

which featured many pieces that are still copyrighted and consequently more expensive.

The funding also allowed us to rent the Knox College chapel for our concert. Without this music and this space, we would not have been able to provide both engineers and the wider university community with high-quality concerts of music that they would otherwise have limited opportunities to hear.

The main ways for alumni to engage with our club are as joining as members or attending our concerts. Anecdotal evidence from our members suggests that alumni attended our concerts.

This funding is important to our club since it is impossible for us as a newly-formed music group to cover our costs with our concert revenues, especially as we are still gathering the permanent resources and equipment that choirs needs, notably a library of sheet music.



During our spring concert - No More Sorrow

Skule™ Dance Club



Total Funding Awarded	\$600.00
EngSoc	\$600.00

The funding Skule™ Dance Club received from the Centralized Process for Student Initiative Fund (CPSIF) was very helpful for promoting our club to new members, as well as improving the experience for current members.

Money was used to fund costumes for our explosive first performance at Matriculation. This was the biggest performance in our club's history, and helped our club becoming more recognizable by Frosh and the overall Skule™ community. Keeping the Frosh Week hype going, we used funding for prizes and to compensate judges in D-Battle. We had 16 people compete, including current members of SDC, people involved in the local Toronto dance community, and even a Frosh who took home first place!

Next, funding was used for food and snacks to during our first General Meeting/Kickoff event. This meeting was a chance for people who were interested to learn more about our club. We had many teachers show up and showcase some of their own dancing, who consist of current students as well as many alumni. Similarly, we used funding for food and snacks during our

Social Events during first and second semester. Through these socials, club members were able to bond beyond the time limit and structure of dance classes.

Lastly, funds were used to buy shirts with the SDC logo for all of our club members. These shirts promote unity between club members during practices and performances, as well as promoting our club to the Skule™ community in the hopes of becoming even more recognizable.

Thanks to the funding from CPSIF, SDC has been able to continue to grow and maintain eager, committed members, through merchandise, social events, and dance events. This year, SDC has performed in many Skule™ events, as well as events in University of Toronto and the local dance community, such as Pre-Frosh, Matriculation, D-Battle, Dancing for the Future with OHDC, MIE Coffeehouse, Lunar New Year celebrations in Chinatown, and Festival of Dance. As SDC continues to perform both within the Skule™ community and outside, we are grateful towards CPSIF as these opportunities would not be possible without funding.



Skule Dance Club at Matriculation Performance

Skule™ Orchestra



Total Funding Awarded	\$3,700.00
MSE	\$100.00
MIE	\$100.00
Civ & Min	\$150.00
EngSci	\$200.00
ECE	\$650.00
EAA	\$1,000.00
EngSoc	\$1,500.00

The Skule™ Orchestra is an engineering faculty music group, about 50 members in size, which serves to enrich the experience of students at the University of Toronto by providing opportunities to both attend and perform in concerts. The Skule™ Orchestra this year organized three concerts with strong contrasting themes. In our November Pops concert, the orchestra performed songs from a variety of Broadway musicals including Les Miserables, Beauty and the Beast, the Sound of Music, Chicago, and West Side Story. Several guest performers were also invited to provide vocals for many of the songs. In our February Chamber Night, the orchestra provided members with the chance to form their own chamber groups and perform repertoire of their choice. Finally, in our March Symphonic Boom concert, the orchestra performed a selection of classical pieces such as Tchaikovsky's Symphony No. 5. The orchestra also provided accompaniment to Alec Xu, the

winner of the Concerto Competition last year, as he performed Africa by Saint-Saens.

The variety of funding sources is a reflection of our diverse membership. Orchestra members come from seven different departments of the Faculty of Applied Science & Engineering and about a third of our members are non-engineers. In addition to helping students pursue their musical interests, the orchestra offers a chance for students to interact with people from outside their discipline and even from outside the engineering faculty, helping build a more unified sense of community within the University of Toronto.

The funding received from the faculty greatly assisted in making orchestra events possible. Our concerts received strong interest from the University of Toronto community. Our Pops and Symphonic Boom concerts had over 100 attendees, the majority of which were students, showing very strong interest in our performances. However, the cost to organize a concert can be high. Our Pops and Symphonic Boom concerts use facilities off campus and as a result, incur about \$1500 each in venue rental fees. Since the orchestra aims to make our concerts as accessible as possible for students, we charge low admission fees, only \$5 for students and \$10 for non-students. Faculty funding helps the orchestra in covering the difference between venue costs and our admission revenues.

Funding was also used to enhance the quality of our concerts. For our Pops concert, the orchestra rented a few instruments so that our members could perform important parts using

instruments that they did not own. Additionally, for Symphonic Boom, funding was used to invite a clinician shortly before the concert to work with the orchestra. Funding was also used to ask a few guest performers to play with orchestra for the concert, in order to bolster some of the smaller instrument sections. In the future, the orchestra plans to use faculty funding to purchase new sheet music to expand the repertoire available.

The Skule™ Orchestra also uses faculty funding to provide social events for members. For the past two years, we have hosted a September social to welcome new members into the orchestra. Funding was used to provide pizza for members to encourage attendance. Other social events include a pumpkin carving event near Halloween, a chocolate fondue social to welcome members back from the winter holidays, a movie night, and socials after our concert performances. Faculty funding was used in these events to buy supplies and cover the cost of food provided to members. In the future, the orchestra hopes to organize additional events for its members, such as a trip to watch the Toronto Symphony Orchestra perform. Funding in this case would be used to subsidize ticket costs.

Finally, funding was used for Skule™ Orchestra promotional events. Over the summer, we collaborated with the other Skule™ Music groups within the faculty to place Skule™ Music-branded Kazoos into F!rosh kits and prepare a presentation at matriculation to promote Skule™ Music groups to the incoming engineers and attract new members. In addition, the orchestra used funding to

participate in the University of Toronto Students' Union clubs fair in order to advertise the orchestra to students beyond the engineering faculty.

The Skule™ Orchestra also has significant alumni involvement. Several alumni (Tom Markowitz, ChemE. 7T6; Amy Sam, MECH 1T7; Kevin Major, CIV 1T1; Robert Zhang, INDY 1T7; Gloria Wu, EngSci 1T6; William Huxter, EngSci 1T6; Billy Graydon, ECE 1T6; and Calvin Moes, MSE 1T3) were regular members and performed as part of the orchestra in our concerts. Alumni have also attended our concerts as audience members, Sal Alberti (INDY 1T3) provided the audio recording for our Symphonic Boom concert, and Calvin Moes (MSE 1T3) constructed a new stand cart for the Skule™ Orchestra last summer. The Skule™ Orchestra hopes that alumni continue to be involved into the future, whether performing with the orchestra, attending concerts, or offering their technical skills to assist with orchestra activities.

In summary, the Skule™ Orchestra would like to thank the Faculty of Applied Science & Engineering for its support. Faculty funding has been crucial in helping the Skule™ Orchestra attract members, promote performances, and organize concerts that enrich the experiences of many students at the University of Toronto. The Skule™ Orchestra hopes to continue providing in the future many exciting concerts, social events to improve the sense of community among orchestra members, and opportunities for alumni to stay connected with the University of Toronto community.



Brennan Schommer, the Skule Orchestra conductor, leading the Skule Orchestra through a dress rehearsal before the 2018 Pops concert, held in the Al Green Theatre of the Miles Nadal Jewish Community Centre



The Skule Orchestra taking a group photograph after our Symphonic Boom 2019 concert



The Skule Orchestra performing in a dress rehearsal at the Church of the Redeemer before the 2019 Symphonic Boom concert

Skule™ Smash Club



Total Funding Awarded	\$500.00
EngSoc	\$500.00

Skule™ Smash Club made the decision this year to primarily invest in our online livestream of our weekly tournaments, as these are one of our greatest assets given how popular they are with our current members and how it single-handedly brings us new attendees. The influx of new players also attracts players from outside the school, which in turn attracts more students as well.

A portion went into buying better audio/video recording equipment. This greatly increases the video quality of our livestreams and has made clips from our tournaments much more attractive to YouTube channels that feature gaming content. Money was also spent on high quality audio mixers, which allows us to have a team of commentators for our livestreams - which greatly increases the production value of the videos and offer another engaging activity for attendees in the form of commentating other players' matches. Funding was used to buy a stream deck to optimize the stream and make the Stream Manager's job easier, further enhancing our livestream and therefore our online presence.

Finally, money was allocated to replacing cables for our current equipment and went to purchasing food for some of our outreach events.

Our recent improvements on the tournament livestreams have seen immediate results. Most noticeably, clips from our tournaments are frequently featured on massively popular compilation youtube channels such as Gloomshot: Melee (14,000+ subscribers) and EvenMatchupGaming (69,000+ subscribers). This included several clips on the Gloomshot channel, where there were clips of our weekly tournaments every week for 4 weeks straight, and a clip from our tournaments that was featured in the EvenMatchupGaming video "SSBM Top 10 Plays of 2018 - Part 5/5 Super Smash Bros. Melee | EMG" where the clip ranked 3rd!

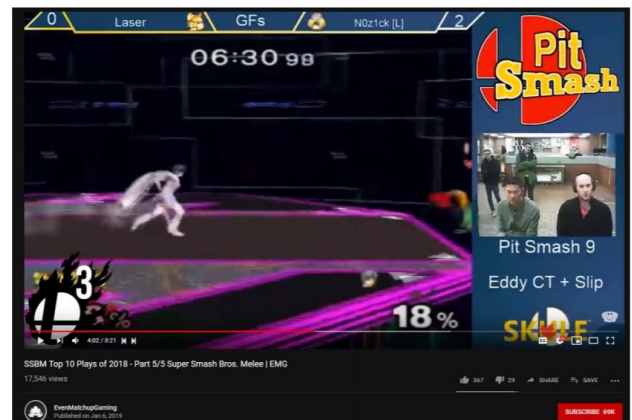
Our increased production quality has also attracted the attention of other U of T clubs such as UTSmash, culminating in a collaborative seasonal event which brought in many new attendees. Our new audio equipment including the audio mixers have also brought in people that attend our tournaments just to commentate on matches. Our improved outreach initiatives continues to bring new students from Skule, U of T and beyond to our tournaments to become active members of our community.

First and foremost, our club is about fun. Skule™ Smash Club is geared towards hobbies/interests (specifically the Super Smash

Bros. competitive scene); we want to show members of the Skule™ community that Skule™ isn't only about class. That is to say, there's more to Skule™ than academia - there are so many ways for people to get involved in the Skule™ community and take their minds off of studying. As a club that focuses on a video game series, we provide a great example of one of the many ways for members of the Skule™ community to not only de-stress, but also improve themselves, not only in-game but as people too. Skule™ Smash Club engaged 4 U of T alumni: Aaron Curtis, who recently graduated in Engineering Science has had an extremely active involvement this year as Tournament Organizer, helping immensely for the tournaments every week to run smoothly. Because the game we play can't be played online, there is a heavy social aspect that is often overlooked by those that see video games as a mundane way to pass the time by battling artificial enemies or faceless strangers online. Because of this, the funding we receive is extremely important for our outreach - getting players to come out and participate in our events in person - and garnering a sense of community in order to retain these players. In the future, we intend to focus more heavily on the social aspect of our club in order to continue the tight-knit community we currently have and extend it to the next generation of Skule™ Smash, and we will need funding for more events.



Clip featured on Gloomshot – Melee's Youtube channel



Clip featured on EvenMatchupGaming's Youtube channel

Skule™ Stage Band



Total Funding Awarded	\$2,300.00
EAA	\$500.00
EngSoc	\$1,800.00

The Skule™ Stage Band is a student-run 20-piece band that performs live jazz music at various Skule™ and community events throughout the year. This year, we received \$2300 in CPSIF funding, \$1800 from the Engineering Society and \$500 from the Engineering Alumni Association.

The funding we receive every year is extremely important to us because it allows us to maintain and replace equipment as well as offset the costs associated with our frequent performances (in particular, transporting equipment and members to/from venues). This year, we used part of our funding to repair our piano and guitar amps, which needed maintenance after numerous years of constant usage, as well as purchase new music for the bands to play. The funding also allowed us to maintain a packed performance schedule of dinner dances (Cannonball, Gradball, and the ECE Dinner Dance), as well as several appearances at Suds and local pubs.

Last year, Stage Band Blue, a second big band, was introduced to provide more musicians in the Skule™ community with the opportunity to play in an ensemble. This year however, Stage

Band Blue was reorganized into a junior jazz combo similar to the existing Skule™ Jazz Combo. This was done to balance the band in terms of instrumentation, and to play different types and styles of music than Skule™ Stage Band. This variety would allow for our listeners to be immersed with a fresh set of pieces for every performance. So far, Stage Band Blue has been a great addition to Skule™ Music by building a stronger community of jazz musicians. This expansion would not have been possible without the generous support of the Engineering Society and the Engineering Alumni Association. We are proud to say that Stage Band Blue shall continue after the success it's had in the past two years, and we look forward to its future development.

Many alumni attend our pub performances throughout the year, including at Ein-Stein Bierhalle and O'Grady's, and we usually allow some time at the end for an open jam session. These allow for reunions between the past and current members, while showcasing their love for music in a fun and vibrant atmosphere.



Members of Stage Band Gold at ECE Dinner Dance. Top row (left to right): Twesh Upadhyaya, Ali Haydaroglu, Jeremy Miranda, Maxwell Fingold, Ishmael King, Andrew Pickering, Nicholas Popowich, Toby Kurniawan, Adam Gee, Alec Gilvesy, William Wang, Ian Webster, Adam Thomas. Bottom row (left to right): Eric Deare, Seung-Hun Chung, Andrew Choi, Tom Zhang, Apurv Bharadwaj, William Bateman



Members of Stage Band Blue at Ein-Stein Bierhalle. Top row (left to right): Adrian Humphry, Ian Wang, Joseph Xavier, Tony Ma, Seung-Hun Chung, Shanna Yoo, Ian Webster. Bottom row (left to right): William Wang, Scott Oxholm, Mark Liao

Skule™ Strategy Game Club

Total Funding Awarded	\$675.00
MSE	\$25.00
MIE	\$100.00
Civ & Min	\$50.00
EngSci	\$50.00
EAA	\$200.00
EngSoc	\$200.00
YNCN	\$50.00

Skule™ Strategy Game Club is grateful for the financial support provided by CPSIF in the past year. Specifically, the club received funding from the above departments.

Skule™ Strategy Game Club was founded in the summer of 2018 and has had a very successful first year on campus. The club's goal was to introduce strategic gaming to U of T engineering students. These strategy games range from cooperative card and board games, all the way to competitive and detailed miniature games. All of these allow students to exercise risk management and strategic decision-making while bonding with other similar-minded players in an accessible environment.

The main event hosted by the club this year was a term-long Flames of War Escalation League followed by an all-weekend Campaign. Flames of War is a historical miniature game that provided a good introduction to students new to strategy gaming. The league was broken down into four rounds of gaming, with new and more complex systems introduced at each round. Anyone walking by Myhal lobby every Thursday night would for sure find our members battling

out. Following the League, during Reading Week, the club hosted a weekend-long Flames of War Campaign in collaboration with University of Carleton Tabletop Game Club. It allowed players to have one more show-down using the skills they acquired over the semesters, while campaigning through different interlinked historical scenarios over the span of two full days.

Alongside the major events, the club also hosted semi-regular board game nights at the beginning and end of each semester, regular one-off demonstration games for complete beginner players, and hobby nights to assemble and paint miniatures. Other miniature games we played included LaSalle, Blucher, Maurice, X-Wing, and Star Wars Armada.

The club was lucky to have received resources from a few experienced gamers in the form of board games and miniatures, especially early in the semester to kickstart some of the events. However, using the funding provided by CPSIF, the club was able to start building up our very own miniature supply, including two playing mats and two full Flames of War armies comprised of 100+ miniatures. This funding was critical for the campaign and escalation league, providing playing spaces and models which allowed almost 50% more people to participate in the event. The club also used some of the funding to purchase a stand-up banner that will be continuously used for promotion. With future funding, the club will continue to grow the gaming library, which will allow us to independently host more large-scale events involving more students.

Notably, the club received support from several Alumni volunteers. Norman Goh (EngSci OT7+PEY, Meng 2015), Kyle Arnold (Mech 1T5), and Michael Chen (EngSci 1T7+PEY) all provided material support and their expertise in miniature gaming, on top of participating in gaming events.



The club hosted a weekend-long Flames of War miniature gaming event, in collaboration with the University of Carlton Tabletop Game Club



Board Game Nights with Skule™ Strategy Game Club



Club members battle each other in Myhal with a fun but challenging miniature game

Skule™ Alumni Outreach (SkuleAO)



Total Funding Awarded	\$550.00
MIE	\$50.00
Civ & Min	\$50.00
EngSci	\$50.00
EAA	\$400.00

This year, that Skule™ Alumni Outreach directorship was revived after an almost two-year hiatus. The committee got together to find an entirely different landscape for Alumni & Student Interactions: U of T Engineering Connect.

This year paralleled the First Year engineering experience, with some successes, but most importantly a bunch of lessons learned. We worked hard to establish relationships with the Advancement Office and student clubs and collaborated on a multitude of events ranging from IEEE's "Energy Mixer" to YNCN's "Resume Hackathon" In addition, we executed our own events, such as "Having Doubts about your Discipline?" and the "LGMB Reunion". Lastly, we released the first-ever guide to alumni engagement for clubs and directorships alike and increased the level of engagement we had on our various social media accounts!

The directorship committee would like to thank all of the students that attended our events, the alumni that volunteered their time, and faculty & staff that helped make the events possible. A special thank you to the Alumni Association, the Department of Civil and Mineral Engineering, the Department of Mechanical and Industrial Engineering, the Division of Engineering Science and the Engineering Society, this year would not be possible without your generous financial support.

It was beautiful to see the past meet the present to pave a better future, this year with SkuleAO.



A photo from our "Having Doubts about your Discipline?" in February 2019



Our "LGMB Reunion" celebrating 69th years of the Lady Godiva Memorial Band

Society of Petroleum Engineers (SPE)



student's chances of being able to get accepted to these companies. Our club has yet to engage with alumni but plan on bringing even more networking events for the students as well as reaching out to more oil and gas companies. We look forward to the continued support of SPE under CPSIF. We would not be here without them.

Total Funding Awarded	\$1350.00
MIE	\$500.00
ChemEng	\$500.00
EngSci	\$100.00
YNCN	\$250.00

The Society of Petroleum Engineers (SPE) was awarded a total amount of \$1350 through CPSIF. The funding was primarily used for planning and food costs when running recruitment events for oil and gas companies. This year we were able to bring in both an oilfield service company in Schlumberger, as well as ExxonMobil's Canadian subsidiary Imperial Oil. Past Presidents and SPE alumni from the U of T Chapter were impressed at the growing list of energy companies that we can provide to students on campus.

We are the only club at the University of Toronto that connects students to employment opportunities in the oil and gas industry since we do not have a petroleum engineering program. We hope to bridge the disconnect between the needs and wants of all engineering students to top energy companies in the world to maximize the

Spark Design Club



Total Funding Awarded	\$4,300.00
MIE	\$600.00
EngSci	\$300.00
ECE	\$900.00
EAA	\$1000.00
EngSoc	\$1500.00

This year, Spark Design Club received a total of \$4,300 from the Centralized Process for Student Initiative Funding. We were funded by the Engineering Society, the Engineering Alumni Association, the Department of Electrical and Computer Engineering, The Department of Engineering Science, and the Department of Mechanical and Industrial Engineering. We really appreciate all the help and support we have received and would like to thank each of these organizations; our club wouldn't exist without their generous support. Our focus is building fun, interactive electromechanical displays around campus. We host build sessions where any interested students (sparkers) are invited to come and help build our projects. We believe that through the build sessions, the students gain valuable hands-on engineering skills as well as understand the design process for our displays. This year, CPSIF money funded five displays (and numerous workshops constructing the displays) and a SolidWorks

design contest. The money also allowed us to invest in new tools and equipment that will enable us to work in parallel and be more efficient in building our future displays. In the remainder of this document, we'll go over each of these projects in a bit more detail.

Frosh Week Display - Infinity Mirror

Spark hosted our 7th annual frosh week event, attended by approximately 50 incoming engineering students as well as around the same number of guests attending the Myhal open house. Spark execs built a room lined with mirror sheets to make up reflective surfaces. The students then made LED lights they used to decorate the inside of the room. The display was showcased during the Frosh week as well as at the Myhal open house.

Simon Display

In September, Spark built an arcade-inspired Simon game. The game consists of 5 buttons that light up in random orders. The participants get points by correctly repeating the LED sequence each round. The LED sequence is extended by one each round. A buzzer also played different tones for each button and when a wrong button is pressed the game is lost. The display was built collaboratively by over 30 students, over the course of 2 days. Students who participated learned to work with drills, mitre saws, hole saws, soldering irons, LEDs, Arduinos, and more. Once finished, the display was showcased in the Bahen lobby.

Snake Display

Spark's second display was a 3D Snake Game, inspired from the traditional 2D snake game. The Snake game is made with a 5x5x8 LED cube for which a 'snake', a string of lighted LEDs, travels around to collect the 'apple', a single blinking LED. In the 3D LED cube, the snake can move in 6 directions, 4 of which are controlled by a joystick, and the up and down motions are controlled by two buttons. The snake gets longer by 1 LED each time it successfully collects an apple and the game is lost when the snake either hits a wall or runs into itself. To construct a perfect cube with just LEDs, a 5x8 grid is laser cut on a piece of wood as a template and provided to the students when soldering the LEDs. Due to the design of the game, the highest achievable score was 318 and was reached by a 1st year math PhD student, Stewart, within the first week.

Tower Display

Spark's third display of the year was Tower. The inspiration was taken from the 'Stack' or 'Tower' game on mobile platforms for which you earn points by stacking blocks on top of another. Two 32x32 LED panels were used as the display. Along with an arduino mega, the display was powered with a computer power supply. The display was built within one workshop session by around 15 students. Students who participated learned to work with drills, mitre saws, hole saws, soldering irons, LEDs, Arduinos, and more. Once finished, the display was showcased in the Bahen lobby.

Other Projects and Initiatives

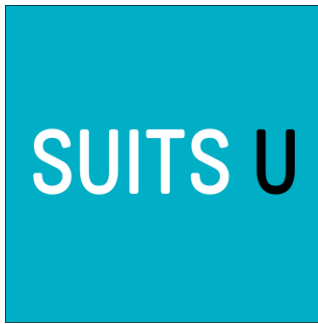
Other than the displays introduced above, we also have our Hoops Game that is still a work in progress. It will be an arcade style mini basketball shooting game where the objective is to shoot the ball into the hoop. Furthermore, we have also participated in multiple events around campus to showcase the fun side of engineering, with the most recent one being Science Rendezvous. CPSIF funds were also used to purchase better tools, which will improve the quality of all our future displays. This year, we invested in a few tools including: 4 power supplies, 1 circular saw, and 1 table saw.

Conclusion

We've had a fantastic year at Spark. Other than We hope that our displays have provided entertainment and inspiration to the Skule™ community, and that our workshops, tutorials, and design competitions have provided the opportunity for students to practice hands-on engineering skills. We want to express our gratitude to all of the organizations that supported us through CPSIF: the Engineering Society, the Engineering Alumni Association, the Department of Electrical and Computer Engineering, The Department of Engineering Science, and the Department of Mechanical and Industrial Engineering.

Without their support, none of our events would be possible. Thank you!

Suits U



Total Funding Awarded	\$450.00
MIE	\$100.00
EngSci	\$100.00
YNCN	\$250.00

Suits U is now a well-established student-run club. After 6 years of successful operations we have grown to be a known entity on campus and unique member of the U of T engineering community. Our mission is clear: to build confidence by providing engineering students with high-quality professional attire at reasonable prices. Our clothes are hand-picked from our collection of donations from retailers and industry professionals. We hold events where we showcase our inventory to students, teach them how to make a great first impression, and help them find the perfect business outfit. We happily teach students basics like how to tie a tie and which buttons to do up on a blazer. These simple but important steps make all the difference.

The students purchase our clothing at highly discounted prices, all while knowing that proceeds from the sale are donated to local charities that empower at-risk youth in Toronto. We believe that with our ability to provide exclusive attire at inclusive prices, we can give

students an equal and fair opportunity at a first impression and pave the way for the next generation of leaders regardless of their background.

This year we were extremely grateful to have received generous support from the Faculty of Applied Science & Engineering in the total amount of \$450. We are grateful to You're Next Career Network who contributed \$250, the Department of Engineering Science who contributed \$100 and the Department of Mechanical and Industrial Engineering who contributed \$100. On behalf of all of Suits U, we thank you for your funding which was instrumental in our efforts to support students and promote a more inclusive campus.

For the third year now, with the funding from the CPSIF, we were able to host a second suit sale event. What made this year different is that the additional funding helped us facilitate a longer event. Previously our events have occurred only on one day, but thanks to your generous funding we were able to host our second event over a three-day period.

Recognizing that commuter students are not able to make it to campus every day of the week and that some students have back-to-back classes which inhibit them from attending our one-day events, we thought it was imperative to expand our event timeline. Hosting the event over a three-day period meant that students who might not be able to make it on Tuesday for example are able to attend on Wednesday or Thursday. This adds substantial cost to our event because we have to pay for the room for additional days, and either pay for over-night storage or vehicles to

move our supplies at the end of each night. Without your generous support this would not have been possible, and some students would not have been able to attend our event. This year, we were overwhelmed with over 1000 new donations on top of a mass of donations from last year which we simply did not have the means to get through. In order to efficiently process this immense stockpile, we have developed a sophisticated supply chain, and this process is a major expense for Suits U. The funding went a long way to making these clothing drives possible. We try to make the process of donation as simple as possible for the companies, so we provide promotional material and advertisements to help employees be aware of when and how Suits U is going to come collect their donations. In particular, we provide boxes for companies to put their materials, and members of our team collect them afterwards. The expenses of purchasing the boxes and the cost of parking and transportation for our team adds up when we have many suit drives and the CPSIF funding was essential for this process. Additionally, storing and sorting all of these donations is costly. We are grateful to have a small office on campus however the 127sqft space is not large enough to store and sort, as a result we rely on a third-party company to provide storage for our donated materials. As items are sorted they are re-located to our storage facility until we need them for our events.

This logistical complication adds significant cost however it enables us to keep substantially more inventory and thereby help more students.

We are also very proud of our updating marketing which is meant to be more inclusive and increase the number of women we support. In past years our events have been mostly attended by men and we are proud to say that we are getting closer to gender parity. Our marketing is more gender neutral and it encourages everyone to attend our events and try on our clothing. We look forward to continuing this trend and inviting even more students to attend our events next year. All of these incredible accomplishments would not be possible without your generous support and we would like to take one last opportunity to recognize the kind-hearted contribution.



At the Suits U Tie Sale event



Suit Sale Event

Sustainable Engineers Association (SEA)



Total Funding Awarded	\$7,450.00
MSE	\$400.00
MIE	\$500.00
ChemEng	\$500.00
Civ & Min	\$600.00
EngSci	\$150.00
ECE	\$2,000.00
EAA	\$2,000.00
EngSoc	\$1,000.00
YNCN	\$300.00

Fueled by the drive to increase interest and awareness about sustainability, Sustainable Engineers Association (SEA) is the foremost sustainability oriented multi-disciplinary student club at the University of Toronto. Our goal to equip students with the tools and knowledge to carry out change and development in the realm of sustainability would not be achieved without the generosity from the following departments: The funding provided SEA with the financial support to execute one of SEA's most important events in the year, the Sustainability Conference. As the largest event that SEA hosts on an annual basis, the Sustainability Conference is a rapidly growing initiative that engages students, alumni, and industry professionals in the constantly innovating field of sustainability. Last year's "Pathways to Sustainability" conference hosted 20 industry and

academic speakers and achieved an attendance of 280 at the MaRS Discovery District. With the tradeshow and panel discussions during the conference, SEA provided a collaborative think tank not only to the students at the University of Toronto, but also industry professionals and general public who are interested in sustainability. SEA also included sustainable catering as we are dedicated to the theme of "Pathways to Sustainability".

Another SEA initiative that benefited greatly from this funding is the Student Projects. In collaboration with Engineers Without Border (EWB), SEA presented a "Bring Your Own Mug to School" event, where free fair-trade coffee was provided to students that brought their own mugs. Free reusable mugs were also handed out to promote the awareness of reusable mugs with in the Skule™ community. Looking forward to next year, Ryerson students have created an SEA branch that is comprised of about 30 undergraduate students. We here at U of T want to push their sustainability program and collaborate wherever possible. Funding can help ensure progress and success of both clubs.

In addition to financial support, SEA benefited greatly from our strong connection with Engineering Alumni. A lot of SEA's initiatives would not be possible without the support from Engineering Alumni, especially the new mentorship program that SEA launched this year with the support of over 20 alumni. Throughout the year, the

mentorship program hosted (on average) monthly meetings to engage roughly 30 pairs of undergraduate students with professional mentors. Additionally, alumni often help SEA in the capacity of seminar speakers, conference speaker, and mentors. The following alumni have made notable contribution to SEA initiatives in the past year:

- Simon Guan, at Student Competition, Career Fair, Conference
- Maged Sami, at Mentorship Program, Renewable Energy Workshop



Sustainable Catering at the 2019 Sustainability Conference, "Pathways to Sustainability"



Discussion at SEA Mentorship Program Event

TechXplore



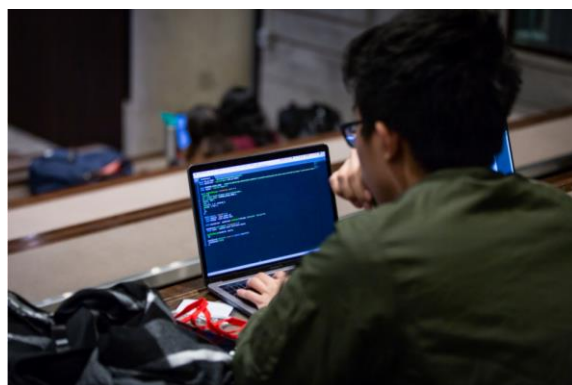
Total Funding Awarded	\$950.00
MIE	\$100.00
EngSci	\$100.00
ECE	\$420.00
EAA	\$100.00
EngSoc	\$130.00
YNCN	\$100.00

TechXplore is a student run club found with an aim of providing technical skills to students with non-technical backgrounds. In the club's third year of operation, it has arranged 9 events in total. This includes 1 information session, 4 individual workshops, 2 panelist talks, and two provincewide hackathons. These events are consistent with the club's goal to empower both Skule™ students and other U of T students from all faculties and colleges. Students also had the opportunity to meet peers from different fields and broaden their sights.

Funding is extremely vital to the operations of TechXplore as we often pay an honorarium or give out gifts to workshop leaders and volunteers that are willing to help at the workshops. This also ensures that the club is able to obtain well-qualified and high-quality instructors. In addition, AV and event space bookings are also main areas to which our funds go towards. Finally, since workshops to learn

technical skills and hackathons usually have long hours, we also provide refreshments to attendees.

During HackXplore, a 2-day hackathon that is solely planned by TechXplore, we had nearly 200 registrants and over 100 attendees. Around 25% of the attendees are students from our Skule™ community. What is valuable here is the opportunity that we created for students from different fields to meet others and expand their views on various topics such as the healthcare focus we had for our hackathon. This also created great impact to other students from the University of Toronto and other 16 universities and colleges in Ontario.



A student following along during a coding workshop



Sai Oduri leads a workshop on web development

The Canadian Association of Food Engineers (CAFE)



Total Funding Awarded	\$950.00
MSE	\$50.00
MIE	\$150.00
ChemEng	\$100.00
EngSci	\$50.00
EAA	\$250.00
EngSoc	\$250.00
YNCN	\$100.00

CPSIF funding granted to the Canadian Association of Food Engineers (CAFÉ) was used to run exciting event to foster student interest in the food and beverage industry. The events hosted this year included a kickoff meeting, a PEY mixer, a mentorship session and CAFE Design Expo.

CPSIF funding was used to purchase food and drinks for all events as well as used for gifts for our guests and U of T Alumni. The kickoff meeting featured an introduction to CAFE, its activities and plans for this year. The PEY mixer brought in students previously or currently doing their Professional Experience Year (PEY) at food companies to share their experiences with students and share advice on how to successfully apply for jobs.

CPSIF was also our main source of funding for our annual design competition (CAFE design EXPO).

This event challenged student team to present innovative solutions to current problems in the food industry to compete for an internship opportunity at Unilever. Student designs were evaluated by our panel of judges which included U of T chemical engineering and natural science alumni. Funding was used to purchase refreshments for the event as well as gifts for judges to thank them for their time commitments.

We would like to thank the following groups for supporting our club activities this year: the Engineering Society, the Engineering Alumni Association, You're Next Career Network, the Division of Engineering Science, and the Material Science, Mechanical and Industrial, and Chemical Engineering Departments. Your support allowed us to enhance the quality of events we offer to Skule™ members with an interest or passion for the food industry.



Our annual design competition (CAFE design EXPO)

Toronto Students Advancing Aerospace (TSAA)



Total Funding Awarded	\$1,500.00
MIE	\$100.00
EngSci	\$100.00
ECE	\$150.00
EAA	\$500.00
EngSoc	\$400.00
YNCN	\$250.00

Toronto Students Advancing Aerospace (TSAA) received \$1500 of funding from CPSIF this year. The funding was used towards running networking panel events, competitions, and an annual conference. The funding enabled TSAA to put together several successful events that included catered meals, merchandise, gifts, and prizes.

The funding allowed for us to enhance our marketing reach and content, which overall impacted the energy and attendance at our event and in the community. This impact will be felt in the long-term as well. The approved \$1500 from this year was a collective amount from the Engineering Alumni Association, You're Next Career Network, the Engineering Society, the Division of Engineering Science, the

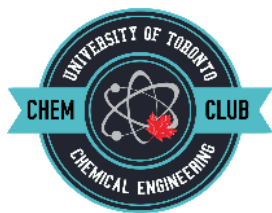
Department of Electrical & Computer Engineering, and the Department of Mechanical & Industrial Engineering. The Engineering Alumni Association and Engineering Society were the biggest contributors and we are extremely grateful for their continuing support. This type of support will enable for a sustainable future of the organization and community around its causes and initiatives.

There were several U of T Engineering alumni present as speakers and attendees at events. Most notably, Kristen Faccioli who is an Operations Engineer at the Canadian Space Agency and Rohaan Ahmed, a Project Engineer at MDA, were very exciting speakers at our annual conference held on February 9, 2019.

Our team also grew this year in terms of number of members, but also area of expertise. We had specialized teams for Business Development and Marketing. This allowed for the organization to be more active, come up with more initiatives, and be more sustainable overall. The increase in operations required resources which were obtained and used thanks to the funds from all the contributors. The expansion of the organization also led to a more vibrant community, generating more interest in the field of aerospace and multidisciplinary engineering. With many of the speakers and guests being alumni of programs at the University of Toronto, many attendees were able to easily relate and learn valuable lessons from people who have gone on to do things that a lot of them aspire to do in the

future. TSAA's events have allowed for this type of mentorship and connection-building experiences. TSAA has had a fantastic year that included member development, community growth, and an overall positive atmosphere and would like to thank all the departments and associations that helped make it all happen through CPSIF funds.

Undergraduate Chemical Engineering Council (Chem Club)



Total Funding Awarded	\$6000.00
ChemEng	\$6000.00

The funding received through the Department for Chemical Engineering and Applied Chemistry and the Engineering Society was used towards a variety of academic and social events for the undergraduate chemical engineering community. Events included:

Academic Events

- Academic Town Halls (One per semester)
- Book smokers (textbook exchange)

Development Events

- First Year Mentorship Program

Social Events

- Semi-formal Dinner Dance
- Class Parties

Smaller social events

Wellness Events

- Ski Trip
- Therapy Dogs

A large portion of the funding received was used towards the annual semi-formal dinner dance which had over 200 students attending. Other minor social events included a Christmas coffeehouse, a Halloween event, sports tournaments, and the end of year event. Chem Club also ran programs during Chem week including the Troost Cup.

The Chemical Engineering First Year Mentorship program greatly benefitted from this funding. The mentorship program enrolled over 90% of the incoming first year students who were paired with mentors of their choice. The program also consisted of events including lab coat decorating, trivia nights, events to get to know mentors and mentees, and ways for first years to destress for their first midterms where over 20 students showed up for each.

The Chemical Engineering Undergraduate Common Room went through significant changes. There was an addition of new furniture and equipment for the chem common room. Changes include new couches, tv, pool table, and snack vending machine. These additions have made the chemical engineering common room a much more inviting place for students to enjoy leisure activities and meet other students. Chem Club also hosted events and initiatives for mental and physical wellness including therapy dogs, a ski trip, and sports games. In recognition of its work, Chem Club received the 2018-2019 Discipline Club of the Year Award from the Engineering Society. Overall, the funding received allowed Chem Club to greatly improve the experience of chemical engineering students in their common room and foster a tight-knit community among its students.



First Year Class Party held on March 26, 2019



*Annual Chem Club Dinner Dance held on
November 23, 2018*

University of Toronto Baja Team



Total Funding Awarded	\$6,100.00
MIE	\$5,000.00
EAA	\$500.00
ChemEng	\$300.00
Civ & Min	\$300.00

The U of T Baja Team is grateful for the continuing support from the Centralized Process for Student Initiative Funding. The funding from CPSIF represents most of the team's income for the year and is vital for the continuation and success of the U of T Baja Team.



This year, the team's focus was to improve the skills and know-how of our members. We did not manufacture a complete vehicle, but rather we completed the frame of a future car, while tearing down, modifying, and re-building the existing car. This allowed the team, mostly consisting of new members, to learn the intricate workings of a baja car. A significant portion of the funds from CPSIF were used to purchase replacement parts for the vehicle that had been damaged by repeated testing at a total of 4 competitions. An example is the rear brake caliper assembly, which, after repeated use, had damaged cylinders, warping the mounting bracket in the process. The replacement of this component allowed our new members the opportunity to learn about brake design, specifications, and manufacture. In addition, the previous engine started to leak oil after a collision at our Midnight Mayhem race in Kentucky. Replacement was critical to the operation of the vehicle. This was another time when new members saw first hand various considerations when designing powertrain geometry.

The most impactful contribution from CPSIF went toward attending the competition in Kentucky. There, members were able to witness the full scale of an SAE event. Seeing other teams' strengths and weaknesses, in the form of vehicle designs and pit crew cohesion, gave our U of T students an experience that they will use to improve the team in years to come. Many members had never seen a competition first hand, and this experience was invaluable. Another benefit of attending was the opportunity to represent U of T on a continental scale. This

trip to competition was made possible by a previous purchase made with CPSIF funds, our enclosed trailer.

Ultimately, our purchases this year were strategic in the short- and long-term competitiveness of our team in the future. The funding from the CPSIF is critical to the team's existence. Without it, we would have no money to attend competitions or to build a car. The CPSIF funding allows us to engage engineering students, help them build confidence in their abilities and get them excited about engineering.

University of Toronto Aerospace Team (UTAT)



Total Funding Awarded	\$8,600.00
MIE	\$1,250.00
EngSci	\$1,100.00
ECE	\$1,250.00
EAA	\$4,000.00
YNCN	\$1,000.00

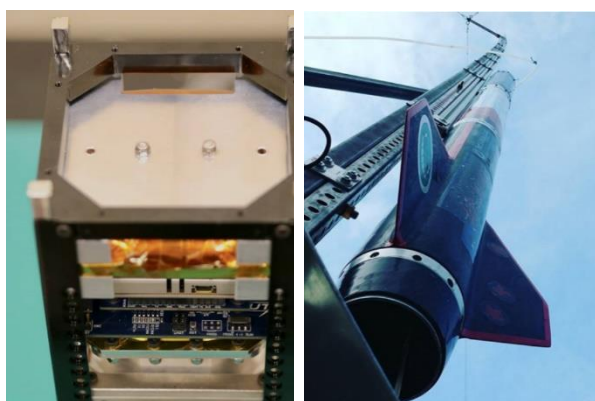
The University of Toronto Aerospace Team (UTAT) continues to push the boundaries of undergraduate student excellence and achievement through ambitious and innovative design initiatives, educational outreach, policy research and advocacy. The team specializes in aerospace technology in the fields of rocketry, microsatellite space systems, and UAV (Unmanned Aerial Vehicles). Through its design divisions UTAT is launching the first student funded microsatellite to perform medical research in space, designing cutting edge fixed wing and quadcopter autonomous drone platforms, and building its rocketry development program to continue innovating in hybrid propulsion systems. The team has also established an Aerospace Policy division to research national and international policy relating to aerospace technology and its applications in our communities. Furthermore, UTAT differentiates itself with its strong commitment to educational outreach in its

community, and to the training & development of its 100+ active undergraduate members. The generous support from members of CPSIF are enabling the team to continue striving for excellence. Contributions from Department of Mechanical and Industrial Engineering, Department of Engineering Science, Department Electrical and Computer Engineering, the Engineering Alumni Association, and the You're Next Career Network, totaling \$8600 are directly impacting the students on the team and help us improve aerospace education, policy awareness, and technology in our community. These funds funded key final components for our Heron Mk. II microsatellite, advanced vision payload systems for our Aerial Robotics UAV, and a variety of equipment & tools to ensure our members received valuable experience with state-of-the-art technology.

More specifically, the team has accomplished the following milestones in building it's vision for aerospace at the University of Toronto:

- **The Aerial Robotics Division** the U of T Blackhawk Quadcopter drone platform for the Unmanned Systems Canada UAV Competition
- The Aerial Robotics **Payload System Team** developed innovative computer vision based detection algorithms used in surveying solar farms to identify damaged panels
- **The Rocketry Division** had two successful launches in the summer of 2018 at the URRG launch site in New York State, validating its state of the art hybrid propulsion system and avionics systems

- Rocketry has joined the **Base 11 Space Challenge** with the TU Wien rocketry team & is completing the preliminary design of a liquid engine rocket to launch to 100km.
- The Space Systems Division has completed critical testing and assembly for the Heron Mk. II microsatellite and microbiology experiment payload system and is scheduled to launch in late 2019
- Space Systems hosted a **Satellite Payload Idea Challenge** and selected a new payload system design for the next generation UTAT microsatellite
- **The UAV Division** is continually improving the UTX Fixed Wing drone platform and increasing its membership size, leading to marked improvements in performance at design competitions and flights
- UTAT has created a new **Aerospace Policy Division** to research the effects of aerospace technology on society and advocate for practical change in legislation in Canada and internationally
- **The Outreach Portfolio** leads one of Canada's largest aerospace focused STEM educational outreach programs with community events (Ontario Science Center, Toronto Public Library) and K-12 outreach



UTAT Space Systems microsatellite Heron Mk. II (left), and Rocketry sounding rocket Deliverance II (right)

Beyond the specific achievements of our design teams, UTAT has built a community of dedicated students from a variety of different fields with a passion for aerospace. These students are building the skills that will make them leaders of tomorrow and bolster Canada's aerospace industry. Many former students have gone on to be innovators and entrepreneurs, and a great deal of alumni continue their involvement as advisors and mentors. Their impact can be seen from teaching new members basic design skills to providing critical feedback in design reviews.

With the incredible work of our dedicated community, UTAT continues to grow, continuing to turn what was once considered impossible for students into sustainable, successful aerospace operations. We are incredibly thankful for the support we receive as we look to grow our impact in the community through outreach and advocacy. The whole team is looking forward to another exciting and successful year! For updates and more information, visit our Facebook page, check out utat.ca, or email execdirector@utat.ca



UTAT Space Systems team performing qualification testing at the David Florida Lab in Ottawa

University of Toronto Biomedical Engineering
Design Team (UT BIOME)



Total Funding Awarded	\$2,738.56
MIE	\$500.00
EngSci	\$200.00
ECE	\$530.12
EngSoc	\$200.00
IBBME	\$1,308.44

With this being UT BIOME's first year as a club, the funds provided to the team, through CPSIF, were vital to the team's development and progress. With this money the team was able to fund two projects: a leg prosthetic for patients with knee disarticulations and a rehabilitation device for wrist injuries. These projects have given students the opportunity to learn more about biomedical engineering in a more applied environment.

For the prosthetic project the team's focus was building a low-cost children's prosthetic meant for applications in third world countries. The prosthetic team was able to create the first iteration of the design shown in the below images. During the Summer of 2019, the team will be moving forward with the remaining funds to finish the final prototype of the design. This will include getting some components machined and others 3D printed. The goal is to have a fully functional prosthetic by the end of the Summer.

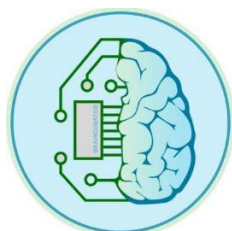
For UT BIOME's second project the team is working on a phone application and wrist patch with sensors meant to help track a patient's wrist injury recovery progress for better treatment and patient engagement. In addition, the team has also been working on building a loading mechanism for the wrist, so that wrist muscles can be recovered in a controlled manner. The goal for this project is to have a working prototype by the end of June. The fund also helped the club start our website (www.utbiome.ca) and other marketing and promotional material such as a club banner for recruitment events and club fairs.

As this was our first year in operation, UT BIOME decided it was too early to engage the Alumni in our operations. Looking to the coming year, the team has recruited a Director of Outreach to begin our interactions with Alumni starting with TED-Talk style lectures from Alumni professionals in the health technology and medical device industries.



First iteration of UT BIOME's prosthetic leg

University of Toronto Brincubator Skule™ Club



Total Funding Awarded	\$1,700.00
MIE	\$500.00
EngSci	\$500.00
EAA	\$500.00
EngSoc	\$200.00

The Brincubator Skule™ Club was designed to act as a bridge for students to learn specialized skills which would be applicable in many other domains, other school clubs, and potentially into their careers as young professionals. In recognition that the life at Skule™ can be hectic, we wanted our club and events to be lower stress by reducing commitment and input, while still increasing learning opportunities and enthusiasm.

We designed our engagements as workshops teaching applicable skills commonly used in industry and commonly used by other clubs.

- This year we hosted a few digital workshops offering an introduction to web development. We engaged in looking at an entire web development technology stack; SQL databases, Python as a programming language, and Django which is used as a back-end framework, JavaScript to manipulate HTML and CSS through React.
- We also hosted some CAD workshops teaching students to use a CAD tool called

OnShape, which is very similar to SolidWorks. OnShape is developed by ex Dassault Systèmes engineers. We opted for this CAD tool because it is web based means we could get everyone access on their own personal machines which reduced set up time.

At these events, we typically had an alum engage students by introducing them to the event / club or to lead some of the curriculum delivered to the class.

To increase engagement, funding was primarily used for nutrition. Most of our workshops were hosted after classes and we wanted to ensure students were ready to learn. Equipment was shared by the umbrella organization, Brincubator, which offered equipment to the Skule™ Club to use without charge. So after CAD workshops, if students were available they have the opportunity to work with a 3D Printer to produce their CAD models in the real world.

In 2019/2020, we expect to grow our initiatives, to continue to use the remaining funding to support our events and increase engagement within the Skule™ Community, and to continue cross pollinating skills between Skule™ Clubs!

This summer we continue to operate on a smaller scale for students who may be present in Toronto. These summer projects will support initiatives in the Skule™ Club by being able to offer better equipment to support fabrication and manufacturing processes our students engage in September. Also, our students who participate this summer will be prepared to use

and operate this machinery and will continue to educate peers to do the same.

This summer we continue to operate on a smaller scale for students who may be present in Toronto. These summer projects will support initiatives in the Skule Club by being able to offer better equipment to support fabrication and manufacturing processes our students engage in September. Also, our students who participate this summer will be prepared to use and operate this machinery and will continue to educate peers to do the same.

In our inaugural year, we did not get to hit all of the goals we set out to reach, however, we got to explore many different engagements, identify what worked well and what didn't, and we built up a reasonably good following of around

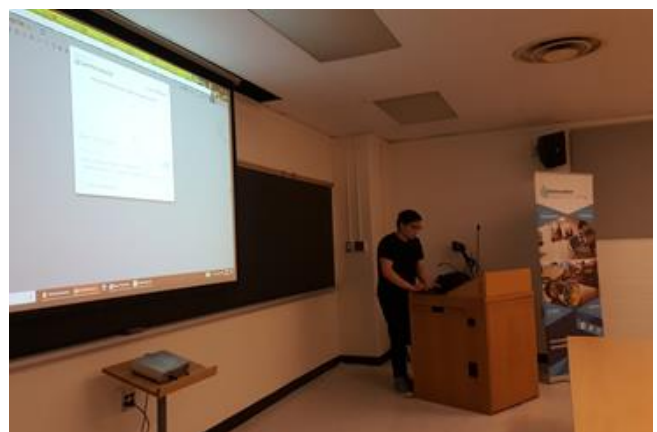
100-120 students with a remote executive team. We are excited about the 2019/2020 school year!

The summer engagement opportunities are:

- Design, and Build a **Robotic Articulating Arm**
- Assemble, Calibrate, and Operate a **CNC Machine**
- Build a WebServer for an **Inventory Management**
- Host and Administrate **OctoPrint** for our 3D Printer



Students at a CAD workshop using OnShape with Greg, a club volunteer



Albert hosting a workshop at the classroom podium

**University of Toronto Business Association
(UTBA)**



Total Funding Awarded	\$1,550.00
MIE	\$300.00
EngSci	\$250.00
ECE	\$500.00
EAA	\$500.00

University of Toronto Business Association (UTBA) is absolutely grateful for the funding provided each year from the Faculty of Applied Science & Engineering. It is due to the support of the alumni and stakeholders that we can hold our events which attract a variety of students from different faculties and fields of interest together.

This year, we have received a total of \$1550 from CPSIF funding. We are proud to announce that this funding has supported multiple events throughout the year including Bridge the Future: STEM x Business, Connecting the Dots, Recruitment Toolkit, and Happy Hour with Recruiters.



Each of these events would not have been possible without the Faculty's funding support. The funding was used towards venue booking, AV & Equipment costs, food and refreshments, pamphlet advertising, and prizes.

The events that we hosted are open to the entire U of T community because we would to bridge students with similar interests together regardless of their field of study. These events included: panel discussions, speaker series, and recruitment help from alumni and industry professionals. For example: The Connecting the Dots Event provided a great opportunity for students to network and connect with industry professionals to learn about internship opportunities. Students who are interested in business related careers had the chance to meet others with similar passions and speak with professionals to learn about the paths that they took and their obstacles along the way.

The events were hosted throughout the academic year from October to March and each event on average had 70 students who participated.



The two pictures above were taken during the Connecting the Dots Event. The first picture was taken during the panel discussion and the second picture showcases the executive team after the event which was a great success

University of Toronto Chemical Vehicles (UTCV)



Total Funding Awarded	\$5,850.00
MIE	\$100.00
ChemEng	\$4,000.00
ECE	\$500.00
EAA	\$500.00
EngSoc	\$750.00

The University of Toronto Chemical Vehicles Design Team (UTCV) is a multidisciplinary design club where students collaborate to build an operational model of a small, autonomous, chemically powered car. This is the second year the club represented the University of Toronto at the annual Chem-E Car Student Competition hosted by the American Institute of Chemical Engineers (AIChE). Learning from the experience last year, UTCV's ranking improved from 9th to 6th in the North-Eastern division of AIChE. UTCV's tremendous success in competition would not have been possible without the generous support of the Faculty of Engineering, Engineering Society, and the Engineering Alumni Association.

The funding provided from CPSIF allowed the student members of UTCV to purchase the materials they needed to gain hands on experience through dynamic team research,

building, and testing, involving iterations to achieve design milestones. More specifically, we were able to purchase chemical, electrical, and mechanical equipment for the design and construction of our final competition car model.

During the 2018-2019 academic year, the club launched 4 divisions that collaborated to design, build, and test our preliminary car prototype. These divisions are: Power, Reactions, Mechatronics, and Operations. The support that we received through the CPSIF has made it possible for these teams to operate and achieve our design goal.

The funding provided from CPSIF allowed the student members of UTCV to purchase the materials they needed to gain hands on experience through dynamic team research, building, and testing, involving iterations to achieve design milestones. More specifically, we were able to purchase chemical, electrical, and mechanical equipment for the design and construction of prototype models. These purchases included various solvents and catalysts, activated carbon sheets, pipe fittings, pipe cutters, grinders, a microcontroller programmer, ceramic capacitors, resistors, current amplifiers, voltage boosters, and 3D printed gears and wheels.

Early in the year, we participated in the University of Toronto's annual Frosh Week Clubs Fair, where over 120 students signed up to our mailing list and expressed interest in being active members of our team. Following this event, we hosted an information session for those interested in joining and had over 60

attendees. Since then our presence in the Chemical Engineering Department grew stronger; expanding our mailing list from 120 to 147 and increasing our team members by 12 students.

Without this funding, our club would not have been able to attract new student members and fulfill its goal of offering true multidisciplinary experience for chemical engineering students. We will continue to expand our engagement with students from other disciplines and work

on collaborating with alumni to foster professional development. In the future, we hope to inspire more students to contribute to a better future where transportation is no longer dependent on fossil fuels. Upon continuous support from University, Alumni, and other student groups, we will work towards realizing our vision to upscale operations from a perfected small car model into an environmentally friendly, one-passenger-sized, autonomous vehicle.



UTCv members preparing for competition at the team's workbench



UTCv Team Delegates at the 2019 North-Eastern Chem-E Car Student Competition



UTCv's 2018-2019 Car Design

University of Toronto Concrete Canoe Team



Total Funding Awarded	\$4,100.00
MSE	\$200.00
MIE	\$200.00
ChemEng	\$100.00
Civ & Min	\$1,000.00
EngSci	\$100.00
ECE	\$500.00
EAA	\$1,500.00
YNCN	\$500.00

The University of Toronto Concrete Canoe Team is thankful to have received CPSIF funding from the above organizations. The funding helped the team design and build its newest concrete canoe, Polaris, which was brought to the 2019 Canadian National Concrete Canoe Competition (CNCCC).

New tools and materials were procured to research and innovate canoe construction. Sustainable design has become a key value in this work, so focused effort was put into reducing material waste and upstream emissions. The team was able to reduce foam required for its canoe formwork by 33% by designing a hollow core mechanism for it. New supplementary cementitious materials were also implemented to reduce embodied energy

associated with concrete mix design by 44%. It is in innovations like these where funding bolstered the ideas of members of the Skule™ community, driving them to develop the teamwork and leadership skills needed for design work.

In addition to work on Polaris, funding enabled the team to take part in events which showcase engineering to the public and students alike. The team showcased one of its old concrete canoes at the Buildings Show in Toronto, proudly representing U of T Engineering while giving team members opportunities to network with industry professionals.

Funding also contributed to the organization of workshops and general meetings for general members. Testing equipment was procured, and on-campus material testing labs were used by members of the team on a weekly basis during fall to evaluate the material properties of concrete mix designs. Tool-usage workshops, in-house hull design programming workshops, concrete design tutorials, and a mini canoe day were also conducted to make members more familiar with the engineering behind making a concrete canoe.

Alumni were even engaged in various events throughout the year, allowing team members to learn about past concrete canoe team experiences and the significance of the work the team does. Former team project managers, James Yip-Albin and Rejuana Alam, helped guide members in multiple team meetings, including casting day (January 19th) and the retirement of their managed concrete canoe

(May 11th) from the 2016-2017 season. A fundraising social event was also held on January 26th with past canoe executives, Evan Ma, Alex Szot, Marko Spudic, and Minh Nguyen, making appearances and reminiscing about their experiences with current team members.

CPSIF funding accounts for 20% of the team's total funding. Without this support, the team would not have been able to engage so many students in professional activities and be competitive at the CNCCC. The team is again thankful for the generous support increasing the accessibility of its hands-on engineering work and professional development involvement.



Team leads, Ashley An and Shirley Zhang (centre), teaching new members about concrete mixing on mini canoe day



Alumnus, James Yip-Albin (right) guiding curing tent construction on Polaris construction day



Team after completing the casting of concrete for Polaris

University of Toronto Consulting Association



Total Funding Awarded	\$3,300.00
MIE	\$750.00
ChemEng	\$100.00
EngSci	\$200.00
EAA	\$1,000.00
EngSoc	\$1,000.00
YNCN	\$250.00

Most of our funding was used for our largest event of the year, the University of Toronto Consulting Conference (UTCC). This conference



Students at UTCC reading a case study

offered students coming from a variety of backgrounds an entry point to the world of consulting. The conference consisted of workshops and competitions, with the former offering students learning material from industry representatives, and the latter giving students the opportunity to apply their newly learned ideas to consulting. Around 25% of participants were engineers, and these students indicated keen interest to join the community of consulting. They were also warmly welcomed by those from the industry. Hence, UTCC is an event that helps bridge the connection between engineers and consultants. This event would not have been possible without the generous funding from CPSIF.



UTCC industry representatives giving a presentation

University of Toronto Earthquake Engineering Research Institute (UT-EERI) Student Chapter



Total Funding Awarded	\$950.00
Civ & Min	\$500.00
EngSci	\$100.00
EAA	\$250.00
YNCN	\$100.00

The University of Toronto Earthquake Engineering Research Institute (UT-EERI) Student Chapter aims to promote the advancement and study of earthquake engineering by creating a connected community of undergraduates, graduates, professors, industry members, and the community at large through Chapter activities. The main missions of the organization includes: (1) organizing relevant academic and industrial guest speakers on research, application, and emerging issues on seismic design, seismic analysis, earthquake risk, loss prevention, life safety, and several issues; (2) supporting the Undergraduate Seismic Design Team in preparation for the EERI Annual Seismic Design Competition; (3) being active in the EERI and U of T community at-large through volunteer work and networking; and (4) advocating improved understanding of the impact of earthquakes on the physical, social, economic, political and cultural environments through these activities. All EERI

Graduate Members work collaboratively as a team throughout each year to complete these roles.

UT-EERI would like to take this opportunity to thank all the parties that provided our group with financial support – the various activities and events described herein would not have been possible without this assistance.

This year, UT-EERI contributed to the earthquake engineering community through three activities: (1) organizing a guest lecture by Mark Nelson, the Advanced Technology and Research Lead at the multinational engineering firm Arup; (2) hosting a visit by James Malley, a Senior Principal from the structural engineering firm Degenkolb Engineers and recognized earthquake engineering expert and (3) ongoing support to the Undergraduate Seismic Design Team. At the time of writing, a third guest speaker visit by structural engineering expert Prof. Eric Williamson from the University of Texas at Austin has been organized for later in May 2019.

Mark Nelson, lead of the Advanced Technology and Research Group at the New York Arup office visited the University of Toronto to present innovative engineering approaches developed to solve challenges while working in seismic regions. The talk, organized and hosted by UT-EERI, was well-delivered and well-attended, engaging a wide audience of undergraduate students, graduate students, industry professionals, and alumni. The benefits of having leading industry experts participate in the UT-EERI speaker series is so that students and researchers can see how research topics

make the jump into actual implementation. As is customary for high-calibre guest lecturers, we thanked Mark with a gift from UT-EERI. The photograph shown in Figure 1 was taken during the lecture.

James Malley, a Senior Principal at Degenkolb Engineering, visited the University of Toronto as part of the EERI Friedman Family Visiting Professionals Program, where he gave a talk and attended presentations where members of UT-EERI shared their research with him. James' talk, where he discussed his experience as a peer-reviewer for the seismic design of several high-profile tall buildings, was very well attended by current students, alumni, professors and practicing engineers from the major engineering firms in Toronto. This talk was the highlight of the year, with funds being used to market the event, purchase food and facilitate light networking throughout his visit. The lecture was followed by a networking event attended by graduate students, James Malley, faculty members, and industry professionals. The photograph on the right, in Figure 2, was taken after the networking event.

The final aspect where we contributed to the earthquake engineering community was through providing support to the Undergraduate Seismic Design Team (USDT). The USDT is one of thirty collegiate teams from North America that is required to design and build a 60-inch scaled wood structure. UT-EERI provided technical support to the USDT through bi-weekly meetings, a lecture series on earthquake analysis and design, and through preliminary shake-table tests with the USDT preliminary structure. The bi-weekly meetings allowed the USDT to gain quick technical advice and ensure that the team was on the right path. These meetings also allowed UT-EERI to understand the larger issues of the design competition, which led to the outline of the lecture series. The lecture series began with analyzing structures under earthquake loading. After the undergraduates developed an understanding of earthquake loading, the following lectures were devoted to designing these structures following the design philosophy of the National Building Code of Canada. The USDT applied the concepts from these lectures to analyze and design their scaled wood structure.



Picture of the UT Seismic Design Team



James Malley's visit on March 28, 2019

University of Toronto Emergency First Responders (UTEFR)



Total Funding Awarded	\$2,450.00
MSE	\$50.00
MIE	\$150.00
EngSci	\$50.00
ECE	\$400.00
EAA	\$1,500.00
EngSoc	\$300.00

Founded by a small group of engineers, the University of Toronto Emergency First Responders (UTEFR) is a student-led volunteer group whose goal is to provide first-aid education and quality pre-hospital care to the entire U of T St. George community. Just this past year, we have been dispatched to a variety of high-profile campus events, such as Convocation, Frosh Week, and Skule™ Nite, where our members have worked alongside Campus Police and various student organizations to ensure the safety of U of T students. It is thanks to the generosity of the Faculty of Applied Science and Engineering that we are able to operate, and we are very grateful for your contributions.

This past year, much of the funding through the CPSIF was used to purchase important medical equipment and responder uniforms. In addition, this funding has been utilized for the planning

of an Emergency First Responder (EFR) first aid certification course allowing UTEFR responders to broaden their first aid skills and thus serve the University of Toronto community better when responding to events.

Building on our work from previous years, we also wanted to continue our commitment to producing highly-skilled responders. CPSIF funding was critical in helping run our bi-weekly training workshops that we provide for free throughout the entire year. These training sessions are important for the professional development of our members and help students from various disciplines come together and bond over their mutual interest in first-aid.

None of this would be possible without donations from CPSIF and all the Engineering Departments that provided funding for UTEFR events/trainings throughout the year. We are truly thankful for your help and hope to continue providing first-aid training/services and promoting safety to students throughout the U of T community.



UTEFR present at the St. Michael's Formal

University of Toronto Engineering Finance Association (UTEFA)



Total Funding Awarded	\$1141.97
EngSoc	\$1141.97

UTEFA is an association at the University of Toronto focused in enhancing Engineering students understanding of economics and finance. At UTEFA we give the students the tools they need to learn about finance from the very basics. The funding received this year went towards the following events:

- October social (hosted 66 students at Ein-Stein Bierhalle) – provided an opportunity for students to get to know their newly formed sector groups and meet their sector heads
- Poker night (hosted 24 interested students in a fun poker tournament) – with a lot of buy side firms using poker games during their interview process (as a way of determining analytical skills and risk tolerance levels) this experience provided a great opportunity for club members to practice their skills
- Holiday social (hosted 50 students at O'Grady's) – provided an opportunity for

students to relieve stress and relax in advance of a busy exam season

- Alumni Pub Night (hosted 50 current members and 10 alumni at Ein-Stein Bierhalle) – provided an opportunity to meet and network with past club alumni

Funding also helped support the following info & networking sessions:

CIBC Information and Networking Session

- Hosted CIBC Capital Markets for an Information Session, which was followed by more than an hour of networking
- Great opportunity for STEM students to be exposed to the world of Capital Markets

XPV Water Partners Information and Networking Session

- Hosted XPV Water Partners to expose our members to the buy side – this included exploring careers in venture capital, private equity, hedge funds, etc., with the primary focus being on opportunities in venture capital and private equity
- Provided a tremendous opportunity for STEM students to be exposed to the world of finance beyond banking, which is often unknown to most students

UTEFA Stock Pitch Competition

- Hosted UTEFA's first ever stock pitch competition with various industry judges from Barclays, BMO Capital Markets, CIBC Capital Markets and NBC Financial Markets
- Judges included:

- Ben Gould, Director, Diversified Industries Group at Barclays (U of T MBA)
- Anton Blochtchinski, Analyst, Financial Institutions Group at Barclays (Indy 1T6 + PEY)
- Yan Truong, Vice President, Global Metals & Mining at BMO (B.Eng, U of T MBA)
- Matthew Wright, Analyst, Global Metals & Mining at BMO
- Meric Koksai, Executive Director, Wealth Solutions Group at CIBC
- Ali Qureshi, Executive Director, Institutional Equity Sales at CIBC (Rotman Commerce)
- Petar Zelic, Director, Technology, Media & Telecommunications at NBC (U of T MBA)



*CIBC Information Session
Representatives*



CIBC Information Session Networking



UTEFA Stock Pitch Competition – Judges & Winners



*UTEFA Stock Pitch Competition
– Disney Pitch*

University of Toronto Engineering Iron Dragons



Total Funding Awarded	\$10,350.00
MSE	\$700.00
MIE	\$1,000.00
Civ & Min	\$300.00
EngSci	\$450.00
ECE	\$1,200.00
EAA	\$3,200.00
EngSoc	\$3,500.00

The U of T Engineering Iron Dragons would like to formally thank all the engineering departments and divisions that have provided us with funding this year. Specifically, we would like to thank the Departments of Materials Science & Engineering, Mechanical & Industrial Engineering, Civil & Mineral Engineering, the Division of Engineering Science, the Edward S. Rogers Sr. Department of Electrical & Computer Engineering, the Engineering Alumni Association, and the Engineering Society. This is an exciting year for Iron Dragons as we will be travelling to Regina, Saskatchewan in July for the Canadian Dragon Boat Championships. These funds were able to help us train and prepare effectively for this event.

The funding has been used for our training at Afterburn Fitness, an indoor dragon boat facility, paddle ergometer maintenance, race registration, transportation, and boat rentals and practice time. The recreational team has also been training at Benson Pool on campus. One of Iron Dragon's main goals is to introduce the sport of dragon boating to the Skule™ community while promoting physical and mental health as well as developing core friendships. From tryouts to the race season, the funding we have received has allowed us to reach over 80 undergraduate students and provide them with experience in the sport of dragon boating. Faculty sponsorship has been invaluable to us during this process. We have been able to plan exciting team building events (for example participating in epic runner in Scarborough) and provide world-class training to facilitate success in the race season. This funding makes the sport more financially accessible to students allowing us to compete in recognized regattas and showcase the exceptional talent of U of T engineers. This is especially important this year as we travel to another province to compete on the national stage.

Furthermore, a crucial part of the Iron Dragons team is our dedicated and inspiring coaches. The three head coaches for our Blue and Gold roster are all U of T engineering alumni; Marissa Goldsmith (INDY 1T4T1+PEY), Michael Lucky (MECH 1T5T1+PEY), and Desmond Chan (CIV 1T3T1+PEY). Furthermore, we have a large support system in place consisting of Iron Dragons and U of T Engineering alumni with valuable paddling experience. This team of

associate coaches includes Allan Shek (CIV 1T4+PEY), Julian Lai (MECH 1T7+PEY), Alexandra Davidson (NSCI 1T7+PEY), and Jacky Lei (LIFE SCI 1T8). The funding has allowed us to provide our coaches with discounted apparel to show our appreciation for the hours they spend coaching us and molding us into champion athletes.

The contributions of the engineering departments and divisions are essential to Iron Dragons. Without their sponsorship, Iron Dragons would not be able to maintain its high crew capacity (3 teams) and quality of programming and training for which our past success is attributed to. This funding ensures that Iron Dragons is accessible to all students following a tight budget. It is not an exaggeration to state that the Iron Dragons would not exist without the generous contributions from each of the departments and divisions in the Faculty of Engineering. With your generous support, over 80 undergraduates are motivated to improve their physical health by maintaining a balanced lifestyle, developing soft skills in team building and leadership, and establishing lasting friendships in a supportive community. As such, the Iron Dragons hopes to continue its partnership with these generous sponsors to help reach a common goal of improving and enriching the engineering student experience—the Skule™ experience—for years to come.

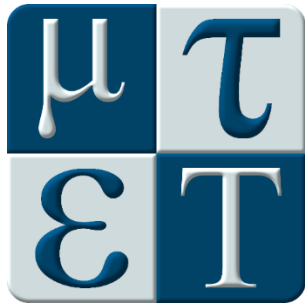


*One of our first practices out on Humber river
this April 2019*



*This is a photo of our women's team after one
of our Afterburn practices. This off-season
training is crucial to our success in our summer
regattas*

University of Toronto Engineering Toastmasters



Total Funding Awarded	\$850.00
MIE	\$100.00
Civ & Min	\$150.00
EngSci	\$50.00
ECE	\$150.00
EAA	\$150.00
EngSoc	\$150.00
YNCN	\$100.00

In 2018 - 19 academic year, thanks to the CPSIF Committee, University of Toronto Engineering Toastmasters accomplished a dramatic growth in size and quality of the experience of our members. Our club hosted Open House event on September 12th, 2018, which was done successfully with around 50 participants who showed interest on our club. The foods and drinks that were provided to the attendees were possible by the funding from CPSIF.

The Open House event leads to a big improvement on the number of members with increase of 100 % compared to the same semester of the previous year. On January 14th, 2019, another Open House event was held with 79 people showed interest on our club which was the most amount of people attended in Open House event. This event led to an increase in the club's total number of members. Thanks to the funding from CPSIF, the same amount of

discount on the membership fee was applied to new members.

Our biggest source of funding for our club comes from the funding from CPSIF. Funding made it possible for many students to afford the membership fee by subsidizing the expensive membership fee from Toastmasters headquarters to student friendly price.



The photo from the Open House event held on September 12th, 2018. As speaker talks, all the attendees paying attention to the speaker



The photo from our biggest Open House ever with 79 people. The pizza and drinks provided could be possible due to the help of CPSIF

University of Toronto Industry Insights



Total Funding Awarded	\$1,600.00
MIE	\$150.00
EngSci	\$50.00
ECE	\$400.00
EAA	\$400.00
EngSoc	\$100.00
IBBME	\$400.00
YNCN	\$100.00

UTII (University of Toronto Industry Insights) is a student initiative that holds lectures to educate students on industry sectors (eg. Pharmaceuticals, Automotive, Banking, High Tech, etc.). Each lecture explores a single industry in an unbiased manner, covering the basics, all the moving parts and current trends.

This year funding was used to support an Economics and Finance Career Conference that was held in November 2018. The funding was mostly used for food, which we book from Hart House, as a token of appreciation to alumni guest speakers and room booking. Our event had around 80 attendees, with 7 guest speakers from economics and financial industries in Canada.

Our public attendance has maintained steadily in the last three years. We surpassed and exceeded our goal of having an average audience of 60 attendees. Our last event

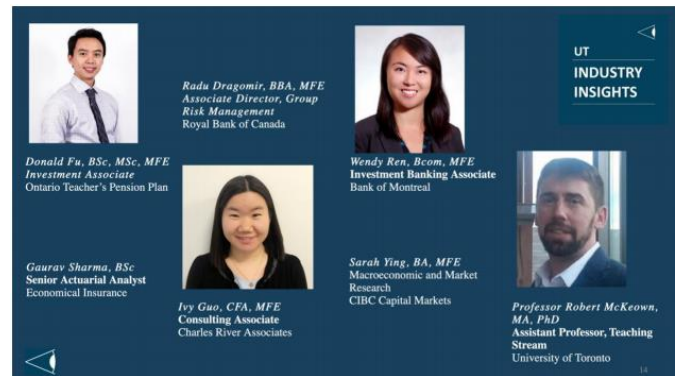
attracted over 80 attendees from various faculties. Our audience varies significantly from all type of undergrad engineering students, grad students, as well as students from Arts & Science Faculty. This report year, the attendees from A&S significantly increased mainly because of the event topic. This year, we chose to book the room and meal plan from Hart House, which increased our expenditure. But according to the feedback we received from our attendees, this year's event was a huge success. Students gained valuable information on different sectors in financial industries and practical advice on searching for internship. Overall, the funding has allowed UTII to hold events for the SKULE™ community both current students and alumni together. Students got an opportunity to learn about their industry of interest while the alumni were able to give back to the community by sharing their insights and experience. UTII had not only provided an avenue for the SKULE™ community to network with other engineers but also with others from the Faculty of Arts and Science.

This funding was very important to us because we could provide food to all our event attendees and volunteers, and gift cards for our guest speakers and panelists. Furthermore, our new guest speakers received a \$20 to \$25 CAD gift card either from Starbucks or Amazon as a symbol of gratitude. In our 2018 economics and finance conference, UTII limited budget was mainly used in meal and room booking from Hart House, which cost us \$528.12. In addition, we also gave gift cards of \$20-\$25 to our seven guest speakers.

Funding from CPSIF is important to allow UTII to continue to help students gain valuable information for their future career paths. Below you will find our guest speakers for our event:

Industry Event: Economics and Finance Industry
(November 1st, 7pm-9pm, Hart House Debate Room)

- Donald Fu (BSc, MSc, MFE) --- Investment Associate, Ontario Teacher's Pension Plan
- Gaurav Sharma (BSc) --- Senior Actuarial Analyst, Economical Insurance
- Radu Dragomir (BBA, MFE) --- Associate Director, Group Risk Management, Royal Bank of Canada
- Ivy Guo (CFA, MFE) --- Consulting Associate, Charles River Associates
- Wendy Ren (Bcom, MFE) --- Investment Banking Associate, Bank of Montreal
- Sarah Ying (BA, MFE) --- Macroeconomics and Market Research, CIBC Capital Markets
- Professor Robert McKeown (MA, PhD) --- Assistant Professor, Teaching Stream, University of Toronto



*Industry Event: Economics and Finance Industry
(November 1st, 7pm-9pm, Hart House
Debate Room)*

University of Toronto Institute of Transportation Engineers (UT-ITE)



Total Funding Awarded	\$1,250.00
Civ & Min	\$1,000.00
EngSci	\$50.00
EAA	\$200.00

The 2018/2019 academic year was a busy one for UT-ITE. We hosted a total of 30 seminars on topics spanning Transportation Engineering and Urban Planning. Funds from the CPSIF were used to purchase food and drinks for our annual open house, where we connected with our professional colleagues in the Toronto Section of ITE, and a scavenger hunt we organized that encouraged chapter members to explore the TTC subway system. We were able to involve several undergraduate students through our scavenger hunt, and plan to focus on increasing undergraduate student turn out in the 2019/2020 year. The UT-ITE Student Chapter organized several social events for our members, including a winter potluck, dinner at the Transportation Research Board Annual Meeting in Washington D.C and a pool evening.

One of our major events each year is our Industry-Student mixer in March. This year was our best mixer yet, with representatives from 17 private companies and 8 public agencies and NGOs in attendance. The mixer is an opportunity for students to connect with

prospective employees in the transportation field and our alumni to maintain connections with UT-ITE and the Transportation Engineering research group. We regularly have students from other universities (York University, Ryerson, and McMaster) attend this event.

Finally, the CPSIF funding also helps to send our team to the Canadian ITE Collegiate Traffic Bowl, which is taking place in Ottawa in June 2019. Our team historically has a strong showing at this event and it also offers students opportunities for networking and learning.



UT-ITE executive team (left to right: Luna Xi, Ran Tu, Daniel Olejarz, Laura Minet, Patrick Loa, Jason Hawkins, Seyedkianoush Mousavichashmi)



Winter Potluck on December 12th, 2018 Sina Bahrami, Professor Matthew Roorda and Zahra Ansarilari

**University of Toronto Machine Intelligence
Student Team (UTMIST)**



Total Funding Awarded	\$2,550.00
MIE	\$100.00
EngSci	\$350.00
EngSoc (winter)	\$350.00
ECE	\$700.00
EAA	\$500.00
IBBME	\$400.00
YNCN	\$150.00

University of Toronto Machine Intelligence Student Team (UTMIST) is a young student club dedicated to clearing the mist surrounding machine intelligence for U of T undergrads. We provide opportunities for members to discuss, participate, and research on the latest machine learning techniques and their emerging applications. We aim to ignite interests and promote undergraduate students' involvement in the field of machine intelligence by hosting technical activities: 1) MIST:RE (participating in paper REproducibility challenge: https://reproducibility-challenge.github.io/iclr_2019/), 2) MIST Paper reading groups, 3) MIST Talk Series, and 4) MIST101 (machine intelligence crash course series). At the end of the past school year, we were able to benefit more than 800 members. We are very grateful for the funding from CPSIF, as the funding were important for helping us

work towards our club mission of spreading the words and clearing the mist around machine intelligence. It gave us the critical financial resources to organize various events, supporting our goals of promoting student engagement and participation in the learning, discussion and research in machine intelligence. The funding facilitated our events by providing food and refreshments to our attendees, making the venue and equipment booking process smooth, as well as covering the thank-you gifts costs for our guest speakers from machine learning industry and academia. In the past school year, we held multiple research talks where we invited graduate students and research scientists from Vector Institute, RBC Borealis AI, Winterlight Labs, and NVIDIA Toronto AI Lab to overview on the state-of-the-art research and applications of the field (e.g., neural machine translation, graph neural network for structured scene understanding). We have received active engagement from our audience on these talks. Student participants were able to learn about the latest frontier research from researchers firsthand. The social at the end of these events provided opportunities for students to connect with researchers from industry and academia.

Apart from research talks, we also continued our flagship machine intelligence crash course series, MIST101, where student members from the MIST Academy led hour-long crash-course-style introduction on one topic of ML. This year, the paper reading group events were also launched, where we invite one grad student each event to go through several research papers centered around a main topic with the audience. Besides providing opportunities to

read about innovative research first hand, this serves as a great resource for participants to learn the skill of efficiently academic paper dissection and comprehension, which is vital in the research community. To make our content accessible to more students and people in other communities, we also launched the blog account on Medium platform to share our technical events in a detailed, yet beginner-friendly way, aiming to benefit a larger general public that is not only limited to U of T students.

This year, we also started a new initiative called, Project MIST:RE, where students form groups of 4 to work on reproducing the results of a ML paper of their choice. The initiative provides practical opportunities for members to develop their ability to comprehend ideas from papers, and implement them into projects, and produce similar results, which is very important in real-life research. And



*Audience Engaging during a paper reading group on graph neural network
(Speaker: Huan Ling)*

members not only were able to learn about existing research, but also have a chance to contribute their own innovative ideas extending off from existing papers. Together, the combination of these events helped creating a vibrant and inclusive platform for on-campus AI enthusiasts to meet, discuss, learn and innovate, and bridging the undergrad community with AI graduate research community.

In terms of alumni involvement, several engineering alumni were invited as the speakers:

- **Sheldon Huang**, EngSci Alumni (April 25, Speaker of the Paper Reading Group on “Exploration on RL”)
- **Chee Loong Soon**, Computer Engineering Alumni (Nov 27, Speaker of the Talk Series on “Machine Learning for Recommender Systems”)
- **Zining Zhu**, EngSci Alumni (Nov 20, Speaker of the Talk Series on “Detecting Alzheimer’s Disease”)



Meet the UTMIST executive team!

University of Toronto Muslim Students' Association (MSA)



Total Funding Awarded	\$1,500.00
EAA	\$500.00
EngSoc	\$1,000.00

The Muslim Students' Association (MSA) is very grateful for the continued funding support of the Engineering Society and Engineering Alumni Association in allowing our club to cater to the intellectual, spiritual and social needs of Muslim students by building a cohesive and unified community on campus, and by providing opportunities for leadership development within the student body.

Our club strives to be a vibrant, integrated and contributing body within the campus community. As a result, some of our most valued objectives are to form a sense of sisterhood and brotherhood on campus, provide a safe & comfortable positive space, and to engage with the broader community, where the broader community includes our alumni. In all our work, we strive to reflect the diversity within our community by forming partnerships with various groups and associations, amongst which the Engineering bodies are some of our most valued partners. This year for instance, one of our executive members was an engineering student on his PEY term. Furthermore, we had three engineering students on our council who

actively organized and lead events on the ground.

To achieve our objectives, we organize a wide range of events and programming, ranging from fun, community-building events (e.g. Iftar, Frosh, Formal Dinner, Destress Week, Sisters' Try Baking) to intellectually and spiritually stimulating events (e.g. New Zealand shooting Healing Circles, Divine Trust) and events that invited Muslim professionals to speak on how to counter Islamophobia and what rights students have.

The Formal Dinner and Farewell Dinner were the biggest events for MSA this year, with high levels of engagement from the student community on campus. The Formal Dinner was a great opportunity to rekindle friendships, make new ones and let loose after an exhausting midterm season. Moreover, Nouman Ashraf, Assistant Professor at the Rotman School of Management, was the keynote speaker for this event. The first issue of the Muslim Voice magazine (TMV) was also officially launched at the dinner and its exceptional pieces were showcased to attendees. We sold out for this event very quickly as we were at capacity of 150 guests at DoubleTree Hotel. Another one of our dinners, the Farewell Dinner: A Night at the Souk, was also very successful and we reached capacity at 170 attendees registered. It served as the final dinner before exam season where students could de-stress and eat a delicious three-course meal for free! We also used this opportunity to bid farewell to U of T's first and longest-running Muslim Chaplain, Ustadh Amjad Tarjin. There were several alumni

amongst the attendees, including engineers, who wanted to bid Ustadh Amjad farewell and interact with their old friends from the MSA.

Furthermore, we launched the third issue of the TMV at this dinner and distributed it students, alumni, U of T faculty members and family members of our council. The theme for this issue was Golden Era: Gilded where we highlighted the contributions Muslims had on their community since its foundation in 7th century. The CPSIF funding was used to print over 150 copies for the TMV's third Issue which were then distributed to everyone in attendance at the Farewell Dinner. The MSA received positive feedback from the community with regards to the high-quality design of the TMV, readers could relate to many of the struggles of Muslim youth highlighted in the magazines. Many of our events throughout the year leveraged our strong alumni relationships. Here are some of our events which engaged alumni:

- Iftar (May 27, June 2, 2018)
- Formal Dinner (November 2, 2018)
- Alumni Networking Night: Road to the Future (January 18, 2019)
- Women's Winter Retreat (February 16-18, 2019)
- Farewell Dinner (March 29, 2019)
- OSP Dinner (March 23, 2019)
- Friday Prayers (throughout the year)

As a community group, we believe that we should always provide a space for our alumni to come back and engage with the student body. We sometimes invite the alumni personally or spread the news of our events in the existing alumni networks. Hence, each of our events

offers our membership a chance to interact with alumni in a more social setting and for the alumni to stay in touch with each other through our events. The Alumni Networking Night invited alumni members to speak about their career path. Students were inspired by hearing about the different routes each alumnus like Mohammad Saleh, an EngSci graduate, took to get to where they currently were. It allowed students to develop their networking skills and provided alumni with a natural setting to mentor students.



Formal Dinner



Women's Winter Retreat

**University of Toronto Project Holodeck
(UTOPH)**



Total Funding Awarded	\$3,750.00
EngSci	\$250.00
ECE	\$3,000.00
EAA	\$500.00

This year marked our move from 706 Spadina to 256 McCaul, which provides us with far more space, flexibility, and security. We invested in electrical equipment (new soldering station, oscilloscope, power supply, etc.) and both the main and secondary VR-capable computers have received hardware upgrades. The secondary system is no longer used as a slave system to the first; it will be used for an as-yet unfinished VR exhibit accessible to the larger Skule™ community. We also invested in a 3D printer for the club, the Prusa i3.

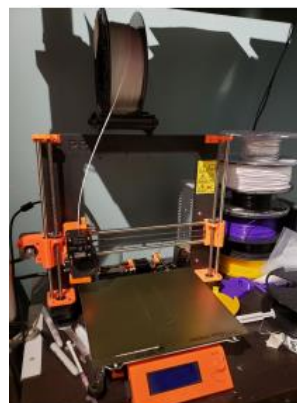
The treadmill developed last year has been proven to work and during the year we designed a more robust frame using 8020 aluminum rather than the welded steel of the original. The second version also features new 'sandals' that slip on over the user's shoe and contains the rollers and trackers. This project has been set aside during the year to focus on the one in the next paragraph, but it is being resumed over the summer.

The year's primary project was the room scanner. There are three main components to

the intended final product: the Vive controller, the 360 lidar, and the YI VR camera. The current prototype contains just the lidar on top of the Vive controller. The scanner takes the point cloud generated by the lidar and rotates all the points into inertial space via the known pose of the Vive controller. This basic functionality has been proven, so the next step currently under development is color mapping to the point cloud via the VR camera.

The Leap Motion tracking project discussed last year was not pursued after December, as an update to the API provided support for connecting multiple trackers at a time. It does not as of yet have the capability to combine the sensory information provided by multiple trackers, so that is what we are attempting to rectify next.

UTOPH is establishing itself as an incubator for VR and AR innovation. The treadmill is functional and being refined, a handheld room scanner for real-time environment recreation is in the early prototype stages, and a long-promised interactive exhibit is being developed for the larger Skule™ community.

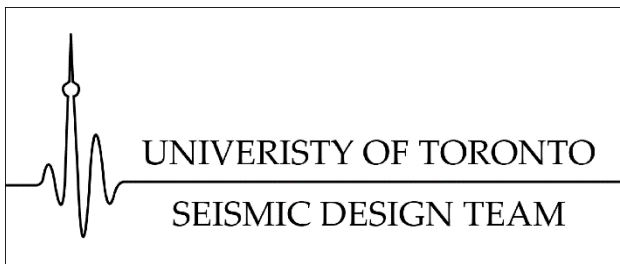


Prusa i3 club printer



VR room scanner

University of Toronto Seismic Design Team



Total Funding Awarded	\$1,850.00
Civ & Min	\$800.00
EngSci	\$50.00
EAA	\$500.00
EngSoc	\$500.00

Most of the funding for the University of Toronto Seismic Design Team is utilized for the Undergraduate Seismic Design Competition. The competition requires each team to design and construct a scaled high-rise tower with balsa wood. Approximately 40% of our funding is devoted to purchasing balsa wood, contact cement, and other tools required for the construction. The team pays for the registration fees for the competition, which was around \$1,200 this year. Funding was also used to purchase food for the team kick-off event in the beginning of the semester. Funding from the Skule™ community is vital for the team's participation in the competition as it allows us to construct and test two full scale towers in advance of our competition. This is important for improving the accuracy of our performance prediction and practicing for construction skills. Through preparation for the competition, the team provides undergraduate students with opportunities to be involved in the design and construction of an efficient structure to withstand earthquakes. For example, we host

workshops in which students can construct mini towers and get familiar with the construction techniques for the large towers. Later, students will be able participate in the construction of the final tower for the competition. During those workshops, undergraduate engineering students connect with each other and share experiences on both academics and extra-curricular activities. As the only engineering design team that focuses on structural and seismic engineering, our team has successfully brought together more passionate students from the Civil Engineering, Engineering Science, and Architecture departments.

The Seismic Design Team provides students from architecture and engineering with a common project to work on. Designing and constructing a tower is a great chance for future architects and engineers to work collectively and learn from each other. This year in the upcoming team sponsors dinner, some representatives from our sponsors are alumni from the University of Toronto.

University of Toronto Space Design Contest (UTSDC)



Total Funding Awarded	\$2,500.00
EngSci	\$1,000.00
EAA	\$1,500.00

This academic year, the University of Toronto Space Design Contest (UTSDC) received \$2500 in funding from the Engineering Alumni Association and the Division of Engineering Science via the Centralized Process for Student Initiative Funding (CPSIF).

In brief, the UTSDC is an international engineering outreach program at the University of Toronto that takes place in the form of an aerospace competition for high school student teams. In February, participants attended a Design Seminar and Mentorship Workshop, where they developed leadership, communication, and teamwork skills through a supervised team building challenge. Students also exercised their capacities for critical thinking and gained exposure to engineering design through an engaging lecture by Professor Jim Davis. Over the course of the school year, high school teams worked on designing innovative solutions to an aerospace-related

challenge that our club set forth at the beginning of the academic year.

On May 3rd and 4th 2019, UTSDC hosted our annual Design Conference at the U of T St. George Campus, where high school students came together to compete and receive feedback on their designs while developing their collaborative and scientific communication skills. The Design Conference was also comprised of tours of the U of T engineering facilities and laboratories, a Blue Sky Solar Racing tour, and a keynote talk by the University of Toronto Aerospace Team (UTAT). Students' design solutions culminated in a series of oral talks, display board presentations, and a written report, all of which were reviewed and scored by engineering professors and student judges in the competition.

This year, approximately 50 high school students participated in our competition while gaining exposure to engineering life at the University of Toronto. The CPSIF funding we have received has been immensely important to us because it allows our club to provide enriched educational programming to these students, maximizing our resources to ensure that our participants benefit greatly from the competition and engage in a learning environment that is conducive to mentorship and team building. More specifically, the funding has gone toward food for our events, the purchase of promotional materials, substantial weekend room booking fees, and collaborations with various engineering groups.

Through our events, members of the Skule™ community have had engaging opportunities for peer-to-peer mentorship with high school

student teams, allowing Skule™ students to develop their communication, teaching, and scientific leadership skills. On a larger scale, this funding has allowed us to host high school students on campus and promote youth engagement in science, engineering, technology and math. Many of our students in previous years have gone on to study engineering at the University of Toronto, and our program has sparked curiosity and interest in U of T engineering programs among our participants this year. Many engineering alumni are involved and actively engaged in the U of T Space Design Contest, typically attending our events as executive team members, volunteers, speakers, judges, and/or mentors.

To conclude, we would like to express immense gratitude to the Engineering Alumni Association, the Division of Engineering Science, and the CPSIF for their funding and continued support of our engineering outreach program, and we look forward to future opportunities for the growth and development of UTSDC.

University of Toronto Sports Analytics Group (UTSPAN)



Total Funding Awarded	\$3,550.00
MIE	\$1,200.00
EngSci	\$450.00
ECE	\$500.00
EAA	\$1,000.00
YNCN	\$400.00

Our club, the University of Toronto Sports Analytics Group, used the vast majority funding from the Centralized Process for Student Initiative Funding to host the second annual University of Toronto Sports Analytics Hackathon, which could not have been run without CPSIF. The hackathon brought together students from various academic backgrounds interested in data science, statistics, and machine learning and gave them the opportunity to work on a real- world dataset under the mentorship of experts in these fields. Many participants expressed their enjoyment and appreciation of the rich dataset they were given.

The hackathon was structured so that every team got to present to the judges, which included alumni, individually and then the judges deliberated and selected the finalists who would have longer presentations in front of everyone. The initial presentations gave

participants, mentors (including alumni) and the organizing committee the opportunity to talk with teams not currently presenting to judges about their work. This was personally a highlight for the organizing committee to get to see in detail the participants' work and ask questions about the work as well as the participants' experience at the hackathon. The biggest highlight at this stage of presentations was a surprise appearance from Glen Grunwald, president of Canada Basketball.

Short term impacts from the event include many participants joining the University of Toronto Sports Analytics Club, as well as participants expressing interest in participating in other hackathons and looking forward to our hackathon next year. Long term impacts of the hackathon include possible future collaboration between attendees of the event as well as participants being inspired by possible career paths.



Sample Hackathon Results Presentation

University of Toronto Concrete Toboggan Team



Total Funding Awarded	\$5,200.00
MSE	\$100.00
MIE	\$1,500.00
Civ & Min	\$1,500.00
EngSci	\$100.00
ECE	\$500.00
EAA	\$1,500.00

The funding we received through CPSIF was vital to our team's many successes this year. For the second year in a row, we won 1st place in the Most Innovative Design category at this year's Great Northern Concrete Toboggan Race in Waterloo. We also won 1st place in Steering Design and other awards for Best Costumes, Best Braking System, Fastest Time, and Best Technical Report.

We used CPSIF to purchase various materials for our toboggan including carbon fiber, metal, concrete materials, and various mechanical components for our steering and braking systems. Our braking and steering systems were composed of steel and aluminum pieces which team members machined to size in our campus machine shop. Team members were able to see

their designs go from concept to detailed schematics to a real-life product. The shell gave members the opportunity to work with fiberglass and carbon fiber, exemplifying how complex parts used in boats, racecars, or even airplanes are made.

Without CPSIF, we would not have been able to produce such an innovative and well performing toboggan or experiment with our carbon fiber shell and high strength concrete mix. CPSIF also allows us to send 30 students to the competition and ensure that the financial burden was not an issue. Being able to take part in this competition is an invaluable experience for all members. Not only do competitors get to creatively apply their engineering knowledge in a hands-on environment, they are also exposed to a tight knit community that allows them to create new friendships and learn from one another.



Concrete Toboggan Team Picture

Our recent performance at GNCTR along with our team's passion for this unique event has led a group of recent alumni and upper year team

members to host GNCTR 2020 in Toronto. We look forward to showing U of T and Toronto how amazing this competition is when we host it in 2020. This year we also interacted with many alumni through our sponsorship team, as several alumni were able to contribute to our team by providing their industry expertise to our project. We look forward to hosting our sponsors and alumni at the sponsorship event in a few weeks, as it will be a great opportunity to wrap up the year with them. We would like to thank all those who funded us through CPSIF, as our success is greatly dependent on your generosity and we look forward to your continued support of our team in future years.

**University of Toronto Formula Racing Team
(UTFR)**



Total Funding Awarded	\$32,350.00
MIE	\$16,000.00
EngSci	\$100.00
ECE	\$500.00
EAA	\$15,000.00
YNCN	\$750.00

Departmental funding awarded through the CPSIF program makes up a large part of our annual operating budget, and we're pleased to say that we're poised for success in the 2019 season. We've completed construction of our 2019 vehicle, UT19, and our first competition at Michigan International Speedway was successful considering the challenges we faced in 2018 and at the beginning of this year. Funds awarded through the CPSIF program were used to construct and compete with UTFR's 2019 race car, UT19. While many of the raw materials used to build the car are provided by our generous community partners, the costs associated with manufacturing a project of this complexity would not be possible without CPSIF funding. UT19 features extensive composite materials on its chassis and aerodynamic packages, and CPSIF funding allowed us to continue to explore our hybrid composite-steel chassis concept this year. Once again, the team will be returning to Europe to compete in the

Formula Student Czech event, continuing our longstanding relationship with OTH Amberg-Weiden in Germany to facilitate intercontinental competition.

UTFR proudly carries the University of Toronto and Faculty of Engineering names on campus, all over the province, and around the world. At the end of 2018, our team hosted the 17th annual UTFR Shootout event, which puts other Formula SAE teams from around North America on track together for a full day of competition. Our 2018 Shootout was the largest student-run Formula SAE event in North America, with 24 teams and approximately 400 students in attendance. Over the winter offseason, we brought our 2018 vehicle, UT18, to the North American International Motorcycle Supershow, where we engaged several potential University of Toronto students, and formed a key new community partnership with a local manufacturing company. In February, two senior members of our team spoke at the Canadian International Auto show on a panel hosted by the Trillium Auto Dealers' Association – a group dedicated to promoting careers in the automotive industry among students – and emphasized the practical learning our team facilitates within the University of Toronto's Faculty of Engineering. As in previous years, our team was a client for both ESP and Capstone design projects.

In April 2019, a feature article was published in the Society of Automotive Engineers' MOMENTUM magazine, which detailed the history of the UTFR team and highlighted unique technical concepts which have drawn

attention to us in the Formula SAE community. In addition to this attention off-campus, we've had a great year on-campus, recruiting and retaining a strong group of first year Engineering students who are poised to deliver strong results for our team in the future.

Our recent alumni form a strong bond between our Engineering students and roles in industry.

This year, UTFR was thrilled to welcome back several alumni for our annual Shootout event and several other informal social events throughout the year. We maintained our relationship with several alumni who continue to seek out PEY students from the Faculty of Engineering, and help students transition into professional environments.



Panoramic group photo of UTFR's 17 th annual Shootout event, held on 29 September 2018 with 24 Formula SAE teams in attendance



Our 2019 car, UT19, in pre-season testing ahead of Formula SAE Michigan 2019 (before adding sponsor logos)



UTFR featured in the Society of Automotive Engineers' MOMENTUM magazine, detailing unique technical concepts which have been developed over the team's history

**Water Environment Association of Ontario
(WEAO)**



Total Funding Awarded	\$1,350.00
MIE	\$250.00
Civ & Min	\$100.00
EngSci	\$50.00
EAA	\$500.00
EngSoc	\$200.00
YNCN	\$250.00

As the incoming co-President and the previous VP-Finance of the Water Environment Association of Ontario (WEAO)'s U of T Chapter, I would like to gratefully acknowledge the CPSIF Funding that we received for the previous academic year (2018-2019) which helped us fund our club initiatives and activities. We were able to secure a substantial amount of funding last year and actively channeled it towards our various club activities.

Like every year, we were able to attend the joint WEAO-OWWA Conference and Meetup scheduled at Ryerson University, where we ended up networking and inviting Edgar Tovilla, one of our Guest Speakers who gave a talk titled "Nutrient Removal from Wastewater". This flagship event kicked off the Fall Semester and saw a fantastic turnout from both undergraduate and graduate units, majority of whom were from engineering. The WEAO team (along with our mother organization WEAO) was able to offer

diverse, new initiatives (based on previous feedback), especially a Leadership for Rising Stars Young Professionals Mentorship Event which had Jimmy Battaglia (Sales and Marketing, OTEC Canada) educating and informing young professionals about the untapped potential of the water and renewables industry, especially across Canada. Likewise, along similar lines, we hosted a Panel Discussion Night where we extensively talked, networked and learnt with some celebrated alumni / seasoned professionals about their careers in this industry, their challenges and what they perceived as the long-term vision of this industry. The highest turnout was seen for the "Careers in Different Sectors of the Wastewater Industry" which had a range of speakers gracing us with their valued presence and profound experience.

Among them were Graham Seggewiss (Project Engineer at CIMA+), Linda Li (Water and Wastewater EIT at Dillon Consulting), Robert Muir (Manager Stormwater at Markham), Ed Broeders (Engineer at H2Flow Equipment Inc.) and Susan Atlin (Manager of Wastewater Treatment for the City of Toronto).

During the Winter Semester, WEAO members took a trip to the R.C. Harris Water Treatment Plant to understand and appreciate how wastewater is treated and is sent to other sectors and industries post-treatment. A huge turnout was also seen for our Technical Seminar titled "Data Analytics in Wastewater Treatment", which was delivered by Ivan Miletic, Data Analytics Leader for inCTRL Solutions. The Chair of the Chemical Engineering Department,

Prof. Grant D. Allen appreciated our club's efforts and brought his entire lab for the event. WEAO also had less technical, more personality grooming based events like it's annual Mentoring Program, Water Trivia Night and an Executive Social at the end of the academic year to reflect on successes, understand and analyze issues encountered with the target of improving our Club's performance for the upcoming 2019-2020 academic year.

Recruitment for this year and have assembled a team of diverse, talented individuals who are keen to launch this club even higher. As a little teaser, we have already secured one of the Leaders of Dow Chemicals, Toronto to deliver his experience and thoughts for this year's Panel Discussion and are looking to expand our vision. We thank the CPSIF Initiative at the University of Toronto for supporting us financially and eagerly look forward to their support for the upcoming year.



Speakers networking with students and posing for a picture during the "Careers in Different Sectors of the Wastewater Industry" at the University of Toronto



A snapshot from the R.C. Harris Water Treatment Plant



Ivan Miletic delivers his lecture on incorporating Data Analytics in the Wastewater Industry

WearTech U of T



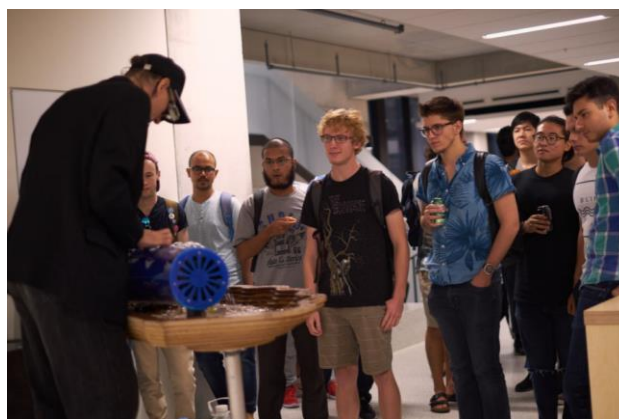
Total Funding Awarded	\$2,550.00
MIE	\$300.00
EngSci	\$300.00
ECE	\$1,000.00
EAA	\$500.00
EngSoc	\$200.00
YNCN	\$250.00

At the beginning of the year, CPSIF funding was used to help establish WearTech's presence at the University of Toronto. We began by hosting two speaker series: one featuring Steve Mann, Father of Wearable Technology, and the other with John Weigelt, CTO of Microsoft Canada. Funding in both cases were used to book venue and food for the guests.

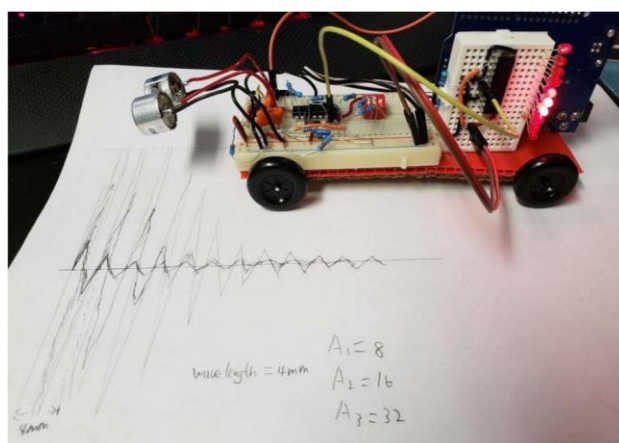
The events hosted using the funding allowed WearTech to attract students who were also passionate towards wearable technology. Many interested guests signed up for the newsletter as well as design subteams (ie. software, mechanical, hardware). This allowed us to increase the presence of wearable technology as an option to students in the University of Toronto Engineering community and acquire bright minds to help us with creating new wearables for the future.

Following the speaker series events, WearTech members separated into their respective design teams, some focusing on software initiatives such as image recognition for the Open Eyetap, while others built items such as wearable lock-in amplifiers, sonar vision systems, ultrasound for heart-scanning.

The funding was crucial in ordering the hardware required to construct these systems. It was used in purchasing breadboards, sensors, wires, amplifiers, and other hardware.



University of Toronto Students attending the WearTech Speaker Series featuring Steve Mann, who is demonstrating his hydraulophone



One of many experimental prototypes made by WearTech members before mounting to the human body as wearable technology

Women in Science and Engineering (WISE) – U of T Chapter



Total Funding Awarded	\$15,000.00
MSE	\$250.00
MIE	\$1,500.00
ChemEng	\$1,000.00
Civ & Min	\$1,000.00
EngSci	\$900.00
ECE	\$2,000.00
EAA	\$5,000.00
EngSoc	\$1,000.00
IBBME	\$2,000.00
YNCN	\$350.00

The University of Toronto's Women in Science and Engineering (WISE) looks to promote the education of women in the fields of science and engineering. To develop women's leadership skills, confidence, and involvement in research and technology, WISE focuses on building a supportive community of men and women through several initiatives.

This year, CPSIF funding was used for events benefiting over 3000 post-secondary students at the annual WISE National Conference, networking events such as our bi-annual WISE and Cheese, an industry mentorship program, and at the International Women's Day Gala. Furthermore, over 1300 high school students have participated in our outreach events through

presentations about the STEM fields at high schools in the Greater Toronto Area, a high school conference, and a high school mentorship program. This funding was critical in supporting our initiatives by providing the necessary means to host events at appropriate venues and provide workshop materials, marketing, and food for participants. Through our events, we were able to help develop professional and interpersonal skills for women in STEM at universities across Canada, inspire high school students to pursue STEM in their post-secondary studies, and raise awareness about the importance of female representation in academia and industry through our online platform and celebrations on campus and work with non-profit organizations in the community.

At the International Women's Day Gala, we provided hexagons that attendees could use to share their stories about being a woman in STEM. Everyone was encouraged to provide something personal, no matter the significance or impact. Furthermore, speakers were brought in to share their successes and struggles, to motivate and educate those who attended the event.

Our industry mentorship program helps connect current university students with industry mentors, and while we provide a baseline structure, we encourage our mentees to ask for advice about their specific situations. Our high school mentorship also provides a more interactive way for high schoolers to learn more about engineering, which is especially important for those who are in Grade 12 deciding on what to apply and weighing their various offers. Out

mentorship programs enable students from high school to the graduate level to connect with those in their fields of interest to help them learn and grow in ways they could not otherwise. WISE also hosts various networking events to help put students in front of recruiters. As part of the WISE National Conference, we hold a career fair hosting over 20 companies. Not all students talk to recruiters for a job, but also seek resume advice and thoughts about the company or industry. The students can mingle with the industry representatives to gain insights into the field, and to learn more about the roles they are interested in, and maybe even to land an interview. New this year was the interview booths on-site, where attendees invited to interview with certain companies could conduct their interview within the timeframe of the Conference.

All these events, and more, were made plausible with the funding provided through CPSIF. WISE received funding from all departments/organizations involved with CPSIF, including various Engineering departments, YNCN, and the Engineering Society. 25 alumni were engaged as mentors in the industry mentorship program that hosts events on campus throughout the 2018 - 2019 school year and speakers at the WISE National Conference.



Delegates at the WISE National Conference 2019