



STUDENT CLUB FUNDING 2014-2015

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Office of Advancement
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Overview

TOTAL AMOUNT OF FUNDING ALUMNI:	\$107,612
TOTAL AMOUNT OF FUNDING GRADITUDE:	\$8,538
TOTAL:	\$116,150

Every year, the Alumni Office, with donations directed from the Dean’s Annual Fund, grants funding to various engineering student clubs. The clubs range from stress release to robotics and from the orchestra to iron-sports. Thanks to generous donations from alumni, students, faculty, staff, parents and friends of the Faculty, the Annual Fund is able to continually enhance the student experience at the Faculty of Applied Science & Engineering. The sponsorship of student clubs leaves a direct and lasting impact - students are able to grow outside of the classroom through professional development and networking opportunities. Participation in co-curricular and extra-curricular clubs also helps to build soft skills, interests and relationships that last long after graduation.

During the 2014-2015 school year, a total of \$116,150 was granted to 59 clubs, of which \$8,538 was raised by graduating students during the 2013-2014 Gratitude campaign. Below is a detailed breakdown of number of applications and total amount granted to clubs during the last two years (please see figures one and two), followed by summaries of the impact that the funds have made on engineering students.

Figure 1: Club Funding Summary, 2014-2015

	May 2014	September 2015	January 2015	Total	Total Unique
Number of Applications	10	34	31	75	67
Number of Applications Approved	7	29	27	63	59
Total Amount Requested	\$29,050	\$85,400	\$68,180	\$182,630	N/A
Total Amount Granted	\$19,750	\$49,000	\$47,400	\$116,150	N/A

Figure 2: Club Funding Summary, 2013-2014

	May 2013	September 2013	January 2014	Total	Total Unique
Number of Applications	13	38	19	70	61
Number of Applications Approved	9	31	19	59	50
Total Amount Requested	\$61,890	\$104,947	\$40,000	\$206,837	N/A
Total Amount Granted	\$23,300	\$43,500	\$43,750	\$110,550	N/A

Overall, in 2014-2015, the Faculty (Alumni, Chemical Engineering, Civil & Mineral Engineering, Engineering Science, Engineering Society, Materials Science & Engineering, and Mechanical & Industrial Engineering) supported the student experience in the total amount of \$217,125, received from alumni donations.

Blue Sky Solar Racing

AMOUNT FUNDED: \$15,000

The funding Blue Sky Solar Racing received from the Engineering Alumni Association was used in two respects: 1) to enhance the undergraduate student experience through professional development and hands-on experience and 2) to purchase materials for the team's 8th generation solar vehicle.



Fabrication Team Lead, **Arshdeep Dhaliwal**, and team members, **Ash Bahri**, **Hiba Khan**, **Jerry Song** and **Wayne Hsu**, work on the surface of the top aerobody plug in preparation for a fibre glass wet layup.

In September 2014, Blue Sky Solar Racing welcomed its largest group of recruits to date. Over 300 students from various disciplines signed up for the new training program which consisted of a series of lectures followed by hands-on workshops. Workshops focussed on fabrication activities such as wet layups and vacuum infusion, suspension repair and assembly, hard point installation, tire changes, and basic circuit and aerodynamic design. Through these interactive workshops, students got a glimpse into advanced design and manufacturing practices, a chance to work in a multidisciplinary environment, and improve their

knowledge of engineering.

Throughout the Fall term, the team also worked tirelessly to complete the design phase of the new solar vehicle. Our alumni have been extremely supportive as they reviewed our design reports and provided invaluable feedback. With the aerobody finalized, the team entered the fabrication phase in January 2015. Our team, which includes a mix of team leads and new recruits, runs on rotating shifts to promote teamwork and offers as many members as possible the opportunity to contribute to the new vehicle. The team travels to sponsor facilities to perform wet layups and vacuum infusions. Furthermore, through interaction with industry professionals, students strengthen communication skills as they gain valuable insight on industry practices and terminology.

Thank you to the Engineering Alumni Association for all your support. None of this would be possible without you.

Bridges to Prosperity

AMOUNT FUNDED: \$1,000

April 2015 marked the end of Bridges to Prosperity - University of Toronto Chapter's first year and we have successfully accomplished the goals that we set for club. We are proud to be sending two students to Chimore, Bolivia in August 2015 to build a 90 meter suspended footbridge in collaboration with students from University of Waterloo and engineers from Bridges to Prosperity. The funding granted to us by the Engineering Alumni contributed directly to our travel team, allowing us to purchase the necessary construction materials, and to afford travel and accommodation. While construction does not start until August, our team (along with the University of Waterloo chapter) has gone through the initial design stages and completed various construction workshops and training modules.

In addition to the bridge project, we have also been very active on-campus in sharing our excitement for bridge engineering and global development. We have hosted University of Toronto's first bridge competition with CSCE, which was a huge success. The event was judged by industry professionals and included over 100 participants. We also hosted two speaker series with Rad Dockery and Steve Dennis, both of whom are very experienced in global development. Lastly we also sent a team to the Troitsky Bridge Building competition at Concordia University in Montreal, placing 10th out of more than 30 teams.

We are very proud of our accomplishments this year, and hope we can count on your continued support, so that we can educate, innovate, and inspire as engineers for the world.

Canadian Association of Food Engineers (CAFE)

AMOUNT FUNDED: \$250

The Canadian Association of Food Engineers at the University of Toronto (CAFE - U of T) is a team of dedicated undergraduate and graduate engineering students committed to the promotion of food industry among University of Toronto engineering students. Our aim is to help students discover career possibilities within the food industry and to offer professional development opportunities by organizing networking sessions, workshop events and an annual competition.



CAFE members networking with alumni and industry professionals.

In Fall 2014, CAFE hosted a networking event in which professionals and researchers, many of which were U of T alumni, interacted with students to share their experiences in their respective fields of work. We also hosted a PEY mixer to allow PEY students to share their experiences at their food-related placements. The speakers shared how they landed their job, their responsibilities and offered advice to students seeking work in the food industry. Students were exposed to a variety of job opportunities in the food industry and learned to tailor their job applications to specific positions.

CAFE is incredibly grateful for funding granted to us which made our club activities possible. The generosity of the Engineering Alumni Association allows us to continue to connect engineering students with professionals in the food industry.

Canadian National Concrete Canoe Competition Organizing Committee

AMOUNT FUNDED: \$3,500

The Canadian National Concrete Canoe Competition (CNCCC) is a national conference that brings together students from universities across Canada. Student teams work together throughout the school year to design, build and compete against other universities at the annual competition. This year, the CNCCC was hosted by the University of Toronto on May 8th, 9th and 10th. The CNCCC Organizing Committee 2015 made it their mission to increase public awareness about the Concrete Canoe competition and to showcase Toronto as a wonderful city in which to live, study, work and play. With over 250 expected participants from 11 different universities, the organizing committee recognizes the conference as an important opportunity to connect with fellow engineers and engineering alumni.

We are very grateful for all your support and wanted to thank you for helping us secure an amazing waterfront venue for the Regatta. Your sponsorship allowed us to organize an alumni social at the Harbourfront Centre. The event was a valuable opportunity for students and alumni to network and expand their respective networks, and allow for the sharing of ideas in the industry.

Canadian Society for Chemical Engineering (CSChE)

AMOUNT FUNDED: \$500

The Canadian Society for Chemical Engineering U of T Chapter is a student organization that provides a wide array of high quality programs and initiatives to Chemical Engineering students at the University of Toronto. Each of our events and initiatives is aimed at cultivating interpersonal skills and fundamental career abilities. Many of the events incorporate the participation of professors, industry professionals and alumni. Members interact and connect with a variety of people which enables them to develop their professional objectives and expand their network.

Our students benefit from CSChE in many ways: they gain knowledge beyond the classroom, network with industry professionals, and learn about advancements in their profession. We also offer professional development opportunities in the form of entrepreneurship and resume-building workshops. A highlight for many members is our Alumni Mentorship Network. We also invite top-of-the-industry alumni to share their success stories through the Chem Sector Info Session. These events help to broaden members' understanding of the opportunities available to them as undergraduate chemical engineering students.

Notably, our chapter won first place of the CSChE Student Chapter Merit Awards during our Chapter Conference, which further enhances the reputation of U of T Engineering across Canada.

Chinese Engineering Students Association (CESA)

AMOUNT FUNDED: \$1,500

The University of Toronto Chinese Engineering Students' Association (CESA) is a student-run, non-profit organization dedicated to promoting Chinese culture, as well as friendship and communication between its members. Running for the 40th year beginning 2015, CESA is one of the oldest and largest engineering cultural clubs at the University of Toronto, with 20 executives and over 400 active members joining us last year (this number is renewed yearly).



Mid-Autumn Festival Celebration 2014

We aim to create a more welcoming environment and a tight-knit community. We recognize the challenges first year students (especially international or out-of-province students) face while transitioning into engineering culture and seek to help them with the process. We hold frequent small scale events, such as Orientation II, where the opportunity for meaningful interaction is in abundance. Secondly, we strive to connect students to resources, whether they are academic, personal, cultural or social. Thirdly, we are passionate about international engineering challenges. We are working to continually improve and grow the Distance Zero series to support this passion and to help students broaden their perspectives as prospective engineers in the international workplace.

Our roster of events include cultural events such as the Mid-Autumn Festival Celebration and Chinese New Year. We also host academic events throughout the year. During the 2014-15 school year, this included APS Hackathon, Programming Tutorial and Communication Seminars. We also held two alumni events, Distance I and II. In October, we invited a CHE alum who successfully grew academic lab results into a successful company. Our professional development events typically focus on international engineering and receive positive feedback all around.

Club of Undergraduate Biomedical Engineering (CUBE)

AMOUNT FUNDED: \$1,000

The Club for Undergraduate Biomedical Engineering (CUBE) has had a very successful year. A total of 10 major events were held throughout the year. In addition to our academic events, such as our Student-Professor Mixer and Summer Research Seminar, we also provided students with unique opportunities to establish industry connections with events such as our Student-Industry Mixer.

The Student-Industry Mixer took place on November 13th, 2014. The 3-hour event was a tremendous success with over 100 students in attendance. With the help of the Engineering Advancement office, we hosted many UofT alumni as guest speakers for this year's event. Speakers included Paul Santerre, a professor of MSE, and Amir Manbachi, CEO and developer of Spinesonics. Speakers delivered a brief introduction to their company, after which students were able to network with the guests.



Students participating in the Biomedical Engineering Competition

We also held our annual competition called Biomedical Engineering Competition (BMEC) on February 8th, 2015. Competitors were challenged to tackle a biomedical engineering problem with limited time and resources, and showcase their designs to fellow competitors and judges. This year, the challenges involved the design of technological communication devices and the design of a surgical tool for exercising or removal of a cancer tumor treatment.

ECE Connections (Graduate Symposium)

AMOUNT FUNDED: \$500

Thank you for supporting Connections ECE Graduate Symposium! This annual event, organized by graduate students of the Department of Electrical and Computer Engineering (ECE) and now in its eleventh year, brings together both industry and academia in an exhibition of ongoing research activities across all areas of ECE. The symposium's aim is to strengthen ties within the U of T community and with the industry by promoting cross-collaboration, by showcasing cutting-edge interdisciplinary research, and by providing a social environment for students, faculty and industry representatives to interact.



ECE PhD candidate, **Mario Badr**, poses a question to the panel during a discussion on Academic vs. Industrial Research, Connections 2014

In addition to oral and poster presentations by students, each year we invite several keynote speakers and panelists to discuss topics ranging from frontier technologies to successful commercialization strategies. Speakers at last year's symposium (May 2014) included Dr. Inmar Govani of Kobo, Dr. Karl Martin of Bionym, and Dr. Aleksey Tyshchenko of Intel, all of whom are proud ECE Alumni. Through the involvement of The Hatchery, Mitacs, The Creative Destruction Lab, and others, we have also provided opportunities for students to learn about industry partnerships and resources available at U of T to aid network development and entrepreneurship. The event concluded with a networking dinner banquet (75-100 individuals) hosted at Hart House.

Your generosity helps provide students with an invaluable forum to sharpen their professional skills and thus strengthen their impact when representing U of T abroad.

Egyptian Students Association

AMOUNT FUNDED: \$250

The Egyptian Students' Association (ESA) was founded in September 2005 with a goal of serving as a vehicle for the promotion of Egyptian culture at the University of Toronto. In addition to conveying Egyptian culture and traditions, the primary goal of the Egyptian Students' Association is to enrich campus life and enhance the student experience by providing a wide range of cultural, recreational and academic programming for Egyptian and non-Egyptian students alike. Engineering students comprise 57% of our members and are the primary beneficiaries of our activities.

The ESA is keen to provide engineers with a forum to interact beyond the classroom. This year's feature event was three day camping trip to Bruce Peninsula National Park that was well attended by both undergraduate and graduate engineering students. This camping trip proved a great way to connect engineers of different backgrounds and education levels and allow them an opportunity to bond outside of the classroom. In the realm of academic programming, the ESA holds biweekly cultural cafes wherein a book summary is presented by a volunteer. Presentations are meant to expose attendees to different fields of knowledge ranging from philosophy to modern physics. Cultural cafes provide an opportunity for social and academic enrichment as well as cross-cultural communication.

On behalf of all members, thank you for your support.

Engineering Orientation 2014

AMOUNT FUNDED: \$2,000

Every September, the cannon fires as ambitious, talented youth don the yellow hardhat to become one with the Skule community at the University of Toronto. For 1000 students each year, it is a time of change, growth, and personal development. Frosh Week events allow for students to get oriented to various aspects of campus life and build friendships to last throughout their university career and beyond. Funding allows us to provide this meaningful opportunity to incoming students and showcase all facets of life at Skule, from academics and clubs to student government and design teams. A large goal of orientation is to engage as many incoming (and upper year) students as possible and make orientation more accessible to students. This year, we had a goal of engaging 100% of the incoming class - funding allows us to provide subsidies for students who might otherwise struggle to attend. At the end of the day, it allows us to build a stronger, tight-knit engineering community.

A vital source of income, alumni funds along with external sponsorships and ticket sales make up the revenue for all costs (roughly \$140,000) of putting on a week of brilliant programming. With alumni funding, we were able to lower the ticket prices by 17% for frosh as well as provide more than 40 bursaries for students with financial difficulty to ensure all students can experience what the engineering community has to offer. To sum up the impact of orientation, the 2014 Orientation Chair Milan Maljkovic describes:

“Orientation engages engineering students in a way that the classroom can’t. It encouraged me to push myself, seek out new opportunities and develop as a future engineer. By introducing a vibrant and diverse group of people, orientation inspired me to grow as a leader and make a positive impact in my community.”

Engineering World Health

AMOUNT FUNDED: \$750

Engineering World Health (EWH) University of Toronto (U of T) Chapter, is a student-led organization that aims to inspire, educate, and empower the engineering community to improve health care delivery in low- and middle-income countries. To reach our goal, we held a one-day symposium on March 30th, 2015 with support from the Centralized Student Initiative Fund.

The symposium consisted of 10 podium presentations, 8 poster presentations, and 2 panel discussions; the program booklet can be downloaded from our website <https://ewhuoft.wordpress.com>. We hosted 88 attendees from diverse academic backgrounds, including biomedical engineering (32), chemical engineering (8), mechanical engineering (5), civil engineering (4), electrical engineering (2), industrial engineering (1), material science engineering (1), track one engineering (1), as well as non-engineering related specialties (34). Attendees had the opportunity to see Grand Challenges Canada Grant winners speak about their exciting work, listen to our undergraduate students' presentation on their design of a vaccine carrier, participate in a poster session that featured our research projects and student organization booths related to global health, and network with peers through our networking reception. The symposium was featured in The Varsity titled "changing course to design better engineering solutions", which created awareness and exposure within the wider UofT community.

We greatly appreciate the financial support from Engineering Alumni Association.

Engineers Without Borders - SCYLC

AMOUNT FUNDED: \$1,500

The success of the Engineers Without Borders Youth Engagement Portfolio - Social Youth and Leadership Conference (SCYLC) 2015 is highly due to the Engineering Alumni Association. We successfully attained 81 students to take part in the conference on May 9th and 10th. Funding was used in two major aspects. The first priority was to keep the cost of the conference low for students to attend and make the conference accessible for as many students as possible. We were able to lower the cost for students to attend the conference from \$100 to \$75. In total, 81 students attend the conference, a 35% increase from our goal of 60. Secondly, the executive team of the conference was also able to pre-order conference materials for the participants to have a great experience during the conference. Some of the items ordered were: T-shirts, SCYLC logoed water bottles, SCYLC logoed notebooks, etc, all of which contributed to creating a valuable and memorable conference for all participating students.



Left: Mike Klassen, keynote speaker, at the opening of SCYLC. Right: Students participating in nighttime activities in Sandford Fleming pit

Formula SAE Racing Team

AMOUNT FUNDED: \$15,000

The U of T Formula Racing Team is proud to have the Engineering Alumni Association as our largest sponsor. This season we divided your contributions to fund the U of T Shootout and the construction of our vehicle UT15 for our upcoming competitions: Formula SAE Michigan, Formula North and Formula Student Germany.

The annual U of T Shootout is the largest student run FSAE-style competition in North America. Since 2001, we have invited 21 teams to showcase and race their vehicles. This year's 13th annual event was our most successful due to a fast track, record-breaking attendance (of over 300 people) and great prizes provided by our sponsors.

With the support of the Engineering Alumni Association, we have been able to provide new members the opportunity to apply their classroom knowledge to our race car design and manufacture their own parts under our guidance. As our largest donor, alumni funding is critical for covering the costs of shipping and registration for all three competitions, but primarily for our overseas competition, Formula Student Germany. This event attracts top teams from around the world, making it the most competitive test for our team and vehicle. As an engineering design competition, the team is required to present the design, methodologies and financial aspects underlying the creation of the vehicle. We are proud to represent Skule alumni as well as the University and are grateful for your continued support.



Driver, Vivek Subbayya, at the Formula North 2014 Competition

IEEE - University of Toronto Student Branch

AMOUNT FUNDED: \$750

The Institute of Electrical and Electronics Engineers (IEEE) is a worldwide organization dedicated to fostering technical innovation by providing essential technical resources and professional services to its members. Through social, educational, and professional development events, we offer members opportunities to connect with fellow students who are interested in technological innovation. During these events, we provide students with engineering related resources and guidance to strengthen their academic abilities. In addition, our club helps students develop insight into possible career paths in various areas of technological development.

Events and initiatives include:

- PEY Interview Workshops: aim to provide guidance and insights into technical interviews
- IEEE Design Team: new team established to resolve realistic challenges through innovative designs
- IEEE Certificate Program: teach students how to design and manufacture a proof-of-concept prototype.

Computer Chapter Events:

- IEEE Xtreme Competition – teams compete in a 24 hour time span against other teams to solve a set of programming problems
- Windward Competition – teams from top universities around the globe have 8 hours to analyze a problem, create a solution and test against entries of other teams
- Software Research Talks – graduate students will speak on software focused research

Electrical Chapter Events:

- Reverse Engineering – series of events offering students guidance and insight into the development of electronic hardware
- Intro to Electronics: ECE alumni and graduate students give students a brief introduction of Electronics and basic PCB design

Power/Energy Chapter:

- Industry Tours – tours to power transmission/generation facilities
- Hydro One OGCC Tour - students learn first-hand the operations that occur in the transmission and distribution of electricity across the province
- Standard Workshops – educate and certify prospective students about existing electrical standards

We are very grateful for the funding we received from the Engineering Alumni Association, without which, these events would not have been possible.

ILEAD: GRAD

AMOUNT FUNDED: \$1,000

The Institute for Leadership education in Engineering's graduate student working group is grateful your support this year. With your help, we ran four events last semester for graduate students across the faculty. Specifically, funding was allocated to workshops on developing networking skills, understanding different leadership styles and resolving conflicts. Attendees at these workshops participated in interactive activities aimed at improving their skills in these areas. We also enlisted a number of speakers in leadership positions in engineering and communications. The capstone for this year was an alumni speaker panel and networking session.

We look forward to continuing to develop a strong relationship with the engineering student body, and we will continue to provide programs for graduate students to improve their leadership skills, and to improve life at U of T in general. With your help, we are on the way to creating a new paradigm for leadership in engineering. Thank you again for your support, and for your continued belief in leadership as an integral part of engineering education.

Iron Dragons

AMOUNT FUNDED: \$3,000

The University of Toronto Iron Dragons is a dragon boat club that represents U of T Engineering in the international dragon boat racing community.

Due to the seasonal limitation of the sport, the Iron Dragons have been training throughout the 2014-2015 school year in preparation for the summer. The funding granted to us will allow us to complete regatta registrations for key events such as the Toronto International Dragon Boat Racing Festival (TIDBRF). Funding has helped us tremendously in providing the means for our athletes to compete against some of the best crews in the world by allowing us to access resources to practice technique during the off-season. We have been able to schedule additional pool practices and paddling facility rentals. Furthermore, with your help, we have been able to continuously grow. Last season, the club's premier crew, Iron Dragons Blue, became one of only two university crews in history to make it to the premier grand finals of TIDBRF.

The Iron Dragons would like to thank the Engineering Alumni Association for their continuous support of our initiatives over the last several years. Without the support of our sponsors, we would not be able to achieve such a unique and exciting experience for Skule students.

Materials Industry Club

AMOUNT FUNDED: \$250

The Materials Industry Club is extremely thankful for the support that the Engineering Alumni Association has provided the club. With the funds we were given, we were able to host three speaker events. The speakers were all well-respected professionals in various fields: Mr. Nishit Patel from Hatch, Ms Janice Zinck from Natural Resources Canada and Mr. Anrin Bhattacharyya, Chair of the Ferrous Metals Research Group in Austria.

We also planned a plant tour at Celestica, where we hosted a meet-up between the Surface Mount Technology Association Toronto Chapter and students from Skule. Students expressed that it was a valuable opportunity to network with industry professionals and that they received great insight into the industry. With your support, we have helped over 30 students reach ASM nights in Oakville. These networking opportunities are invaluable to students as they help students advance their professional opportunities by connecting them with the people in the industry.



2014-2015 Materials Industry Club Executive Team and Faculty Advisors

Mechatronics Design Association

AMOUNT FUNDED: \$1,000

The Mechatronics Design Association (MDA) is a multidisciplinary student design group that promotes robotics at U of T. Students gain invaluable experience in the design, construction and testing of a complex mechatronic system, as well as learning how a large-scale engineering project works from both the administrative and technical perspectives.



The MDA submarine at the 2014 AUSVI RoboSub competition in San Diego

During July of last year, MDA sent six students to San Diego to represent U of T in the AUSVI RoboSub competition. Our members were able to interact with some of the brightest students from around the globe and bring back innovative ideas on how to compliment the great robotic practices at MDA. For the 2014-2015 school year, senior club members will lead the new roster of members to build and revamp the Autonomous Underwater Vehicle (AUV) for the 2015 AUV competition in San Diego. Members will be able to apply their knowledge and transform their ideas into reality. They will also be immersed in industry-level practices and receive support from MDA

alumni and returning PEY students.

To accommodate for the new AUV parts, our budget was increased and your funding will be allocated towards the purchase of the external components for our AUV (ex. Machine vision camera, thrusters) and it will facilitate the competition preparation (pool testing, shipping fees, etc). With your support, MDA is able to continually provide members with the opportunity to network with like-minded students who share their enthusiasm about mechatronics. Thank you.

Multidisciplinary Analytical Kinesthetic Education (MAKE)

AMOUNT FUNDED: \$200

The Multidisciplinary Analytical Kinesthetic Education (MAKE) club was formed with the aim to connect theory-centered curriculum with real and practical applications of the different engineering disciplines. We provide first year students with tools to create tangible materials to enhance learning and understand the real-world applications of what they learn in class.

This year, we were able to develop and host nine events catered to different engineering disciplines. Events included: an ECE-related event about electric motors, a CIV-related event on truss design and failure, and an MSE-related event focussed on crystal structures. Each of these events saw 20 to 60 first year engineering students participate. We are also involved with the Skule Carnival and incorporate our events in the Skule Digest.



Truss Event: Loading a truss to failure

The Engineering Alumni

Association has been our club's largest contributor. With your funds, we were able to promote ourselves for greater recognition and supply each student with sufficient materials to create functional prototypes. Our goal is to keep events as accessible as possible and we were able to host these events free of charge to participating students. We hope you will support us as we continue to provide more events that encourage kinesthetic learning.

National Society of Black Engineers (NSBE)

AMOUNT FUNDED: \$2,500

National Society of Black Engineers' mission is to increase the number of culturally responsible Black Engineers who excel academically, succeed professionally and positively impact the community. We strive to accomplish the following objectives:

- Stimulate and develop student interest in various engineering disciplines
- Increase the number of minority students studying engineering
- Encourage members to seek advanced degrees in engineering or related fields and to obtain professional engineering registrations
- Promote public awareness of engineering and the opportunities for Blacks and other minorities in the profession



Hour of Code at Mother Teresa Secondary School

The NSBE U of T chapter uses various events as tools to achieve these goals. This year, we had a hackathon event called “Hour of Code” at Mother Teresa Secondary School in Scarborough. We also hosted coding competitions aimed at challenging younger students to excel in a Science Technology Engineering and Math environment. Events like these that serve to teach and inspire kids about the importance and beauty of science and math help create more engineers. The funds granted by Skule Alumni always serve to support our goals because money enables us to purchase materials and finance logistics (ex. transportation) that in turn allow us to contribute positively to the community.

Ontario Water Works Association (OWWA)

AMOUNT FUNDED: \$500



The panel discussion with the Director, **Sturla Gunnarsson**, after the screening of Monsoon documentary.

The University of Toronto Ontario Works Association Student Chapter (U of T OWWA-SC) would like to thank the Engineering Alumni Association for supporting our events during the 2014/2015 school-year through the Student Club Funding program.

With your generous support, we were able to bring together alumni, faculty and students for our annual World Water Week Film Screening and Panel Discussion event. We hosted a viewing of Monsoon, a 2014 Canadian documentary film by Sturla Gunnarsson about the monsoon weather system in India. The screening was followed by a panel discussion with the Director,

which led to a very meaningful discussion about the importance of water in our lives. We also engaged alumni in a panel discussion.

The World Water Week event is an important event for the U of T OWWA-SC, as it tends to attract new members and results in meaningful conversation about global water issues. This event raises awareness and is a valuable learning opportunity for students interested in water issues, whether they are in Engineering or in other disciplines.

Promise to Future Generations

AMOUNT FUNDED: \$300

The "Promise" document, which is the hallmark of Promise to Future Generations, was adapted from a document written by Jacques Cousteau in the 1970's entitled "Bill of Rights for Future Generations". The aim of this document is to drive a paradigm shift: to look beyond "me" and "now" to ensure we are considering the needs of future generations in all of our decisions. Those who commit to this promise as part of our club participate in the annual Signing Ceremony. To this date, we have had over 400 graduating students, faculty, alumni and industry representatives participate.

Our events are designed to inspire and educate: to learn more about the issues facing our generation and to explore what we can do to protect the rights of future generations. For example, our "Are You Smarter than a Professor?" trivia events where professors teamed up with students to answer questions about resource use and sustainability. In our Alumni-Guest-Speaker events, we have alumni discuss how the Promise has influenced their professional careers and decisions. Our events roster for this school year included: "Steve Dennis: Our Responsibility to Current and Future Generations", "Mike Moffat: Sustainability Lecture Series", and our second annual "PTFG-iLEAD networking panel event". At these events, speakers were able to illustrate the successes or challenges of transitioning the Promise values from university to a work environment.

Robotics for Space Exploration (RSX)

AMOUNT FUNDED: \$4,000

On behalf of Robotics for Space Exploration (RSX), we would like to express our deepest thanks for your generous support in our second year. As a relatively young team and the only space engineering design team at University of Toronto, your support this year has been invaluable and has helped us to grow our team immensely. With the long term vision of becoming the first undergraduate team to send a robot to an extra-terrestrial body, we are truly honoured to have the support of our own alumni.

Having been around for just over a year, we have already accomplished a lot: we competed in the barren deserts of Utah against over 30 international teams with our built-from-scratch Martian rover Origin; we launched engineering payloads into the upper atmosphere on high altitude weather balloons; and we won first place at the CSii's Innovation Nation Robotics Competition by demonstrating our rover.



RSX Mars Rover, Origin

We are currently all working to design and build our second generation Martian rover, as part of our second mission – which we call MRSX-2 - to compete in the international University Rover Challenge (URC), hosted at the Mars Society's Desert Research Station in the deserts of Utah. In addition to our now annual missions to the URC in May, we are also currently working on a

mock spacecraft designed to re-enter the atmosphere, conduct scientific experiments and land safely, in preparation for the international CanSat competition in Texas, hosted by the IAAS in June.

Skule™ Alumni Outreach

AMOUNT FUNDED: \$530

After a year of working on a building Skule Alumni Outreach (Skule AO), we have successfully become an official Directorship of the Engineering Society as of February 2015. Created in June 2014 as a temporary internal directorship, Skule AO has worked towards improving the quantity and quality of opportunities for skule alumni as well as the larger skule community. We seek to enhance current students' experiences, engage alumni with volunteer opportunities, strengthen relationships between alumni and students and assist our graduates in the transition to alumni. We recently launched alumni.skule.ca, the Skule alumni portal as a way for alumni to connect with Skule students and clubs. Moving onwards to the 2015-2016 school year, Skule AO will continue to pursue activities and partnership that will enhance the opportunities for various members of the Skule community to contribute to our growth, our reputation and the student experience.

Skule Nite

AMOUNT FUNDED: \$5,000

Skule Nite is an annual musical and sketch comedy revue held at the Hart House Theatre, created and run by undergraduate engineering students. The show attracts an audience of over 2000 over its annual run of five performances. Engineering students from various disciplines contribute towards the writing of sketches, musical numbers, arrangements, set and costume design and fabrication. The cast, stage crew and technical team are nearly all undergraduate students who volunteer their time and effort to bring this incredible production to life. Skule Nite has been a huge part of the U of T Engineering community for over 90 years and inspires over 2200 Skule students, alumni, friends as well as students from other faculties every year, and its popularity and scale reach students across all faculties. The highly successful and unanimously appraised Skule Nite always sells out within the first few weeks of ticket sales, and that is something we are very proud of. Over 100 engineering students from diverse departments work all year to put up this amazing show.

The funding generously granted to us by the Engineering Alumni Association was used for the core building blocks of the production: materials for the set, props, costumes, equipment rentals, promotional marketing materials, and space allocation for construction, rehearsal and performance. This year, we included special effects with LED strips as well as moving set pieces, and the funds greatly contributed to improving the quality of the show. This is also part of a strategic five-year plan to progressively increase the magnitude and quality of the show to match professional standards. Thus, the funds will also serve as an investment for future years in the form of better and professional equipment.

Skule Orchestra

AMOUNT FUNDED: \$1,000

The alumni funding granted to us constitutes a generous portion of our fall funding and we are sincerely grateful for your generous sponsorship as it helps us to hold events that enrich the entire Skule community. The majority of the funding that we received was used for our 'Pops' concert, which appeals largely to a student audience. Its program is comprised of popular music, movie themes and show tunes. Specific uses of the funds included advertising, venue rental, insurance and sheet music rental.

Advertising is particularly important to the success of our event and as a result of our great advertising efforts helped us to make this one of our most successful Pops concert to date. We were also able to secure a venue close to campus and thus able to garner a larger and diverse audience. Our repertoire for the concert included Tchaikovsky's Nutcracker Suite, as well as selections from movies, musicals, and cartoons.

Our other events this year, made possible in part by our generous sponsors, included a field trip to attend a concert by the Toronto Symphony Orchestra, which was a performance enjoyed by all.

Our club operates on a budget of about \$12,000 per year, with roughly a third of this amount required for our fall events. About half of our revenue is derived from sponsorship, including the contribution of the Engineering Alumni Association, which constitutes a generous portion of our fall funding. Your sponsorship is sincerely appreciated.

Skule Stage Band

AMOUNT FUNDED: \$500



Skule Stage Band at the EngSci Dinner Dance

The funding we received from Engineering Alumni Association has been extremely helpful to the Skule Stage Band this past term. We have been able to perform at various events and showcase the talents within engineering and give back to the U of T Engineering community in the form of live entertainment.

This year, the Skule Stage Band appeared at Halloween Suds, EngSci Dinner Dance, the wedding of two Skule and Skule Stage

Band alumni, and an end-of-term performance at Grossman's Tavern. The funds were used to purchase sheet music, transportation of equipment and the band to and from venues. New sheet music allows us to develop our musical and team skills. Transportation to venues has enabled us to perform within Skule as well as to the wider U of T community. We will also be investing in new stands and repairing/replacing aging equipment.

Skule Stress Release

AMOUNT FUNDED: \$300

Skule Stress Release is very thankful for the funding provided by our awesome alumni, not only because this is the first funding our club has received, but also because the events supported by this funding have had a positive influence on the engineering student body in relieving stress. We used the entire amount to fund materials for three events during the winter semester. The first event was “Throwing paint” which was held during the midterm season. Within 1.5 hours of the event, more than 130 students participated and we also garnered interest from staff. Students had fun and we gathered more interest in our club and events. While waiting in line, students were also able to release stress by sharing the cause of their stress with others. Without funding from the alumni, we would not have been able to hold this event and to see so many happy faces.

Our second event, “Hot & Spicy Wing Eating Competition”, was hosted by a professor. Research shows that eating spicy food helps to release stress. The winner of the competition won a cash prize and the remaining contestants enjoyed the leftover wings. This was another successful event. Our last initiative was delivering hand-written cards to students studying alone during final exams week. All students were happy to receive a card of encouragement and to have conversation with our executives.

We enjoyed making our events personal and meaningful and we could not have done any of this without support from the Engineering Alumni Association.

Society of Petroleum Engineers

AMOUNT FUNDED: \$500

Society of Petroleum Engineers (SPE) at the University of Toronto would like to thank the Engineering Alumni Association for its generous contribution to our club. SPE aims to facilitate professional, community and leadership development for engineering students interested in the petroleum industry. The funds we received were used for events and workshops that are aimed at developing technical knowledge and furthering professional development in the field of oil and gas.



Mustafa Al-Sabawai from Imperial Oil speaking to Society of Petroleum Engineers

Two of our recent events during the winter term were 'PEY Coffee House' where students from lower years networked with those who completed their PEY at oil and gas companies and 'SPE Seminar Series: Tailing Ponds' which focused on a presentation in managing oil sands tailings by Dr. Jacob Masliyah (Professor Emeritus from the University of Alberta). Your support helped us organize events at a larger scale, which in turn promoted SPE's presence throughout the faculty and helped us grow our numbers. The quality of our technical seminars has attracted the attention of students who are passionate about the petroleum industry and want to become more involved with our club and SPE International. Thus, we are also fostering community and leadership development.

Spark Design Club

AMOUNT FUNDED: \$1,200



Spark Blocks

The Spark Design Club aims to promote creativity and design on campus. We hold workshops to build interactive electro-mechanical displays that demonstrate engineering principles and create a fun and inspiring atmosphere for our peers. These workshops allow members of the Skule Community to gain hands-on experience with tools, soldering, and problem solving. We also hold a Solidworks modeling and

design contest to provide a platform for our peers to improve their 3D modeling skills.

With the support of Engineering Alumni Association, Spark created three displays during the 2014-15 year: Spark Blocks during F!rosh Week, the Marble Machine, and the Useless Box. Each display featured a different skill set to develop during the workshops. The Spark Blocks introduced incoming first year students to the possibilities of LED technology and teamwork, the Marble Machine emphasized carpentry and mechanical debugging, and the Useless Box exposed members to electrical circuits, soldering, and programming micro-controllers.

Through participation in Spark workshops, students engage in technical and hands-on learning in a safe environment, and develop their communication and teamwork skills. Students also learn firsthand about the discrepancies that arise in the process between theoretical design and physical implementation, and how to address the challenges of full-system integration.

Currently, Spark is hosting its annual Solidworks Design Contest, which enables participants to develop and showcase their modeling skills using Solidworks software. Additionally, we invite alumni to get involved with Spark as guest judges.

Sustainable Engineers Association

AMOUNT FUNDED: \$1,500

The Sustainable Engineers Association (SEA) is a student club that empowers students with knowledge, interest, and experience within the domain of sustainable development. With your generous support, our team has worked to bring high quality opportunities to our members including industry tours, seminars and a case competition.

During the fall semester, we had four industry tours: Evergreen Brick Works, the Steam Whistle Brewery, Direct Energy Centre, and the Humber Wastewater Treatment Plan. Through these tours, students were able to experience the synergy between social responsibility and commercial gain at Toronto's leading industries.

We hosted our first seminar with guest speaker Sean Magee from Bullfrog Power. While learning about climate change and renewable energy, students discussed how to accelerate the growth of community-based renewable energy in Canada. We also hosted our largest Case Competition to date with invited judges from Celestica. The first round of competition was on January 10th, where students received a challenge in the morning and presented their respective solutions in the afternoon. The top 2 finalists presented their designs in front of industry professionals at the 2015 UofT Sustainability Conference on January 31st, 2015. This incredible experience challenges students to be creative while addressing all components of a sound business model.

Our events educate and lead engineering students to develop the skills necessary to shape a sustainable society. SEA believes events like these significantly enhance students' learning experience and provide opportunities for personal and professional growth. We are grateful for alumni support in our endeavours, and continue to work hard to serve the student body.

Tetra Society at University of Toronto (Tetra@UofT)

AMOUNT FUNDED: \$500

Tetra@UofT aims to make improvements in everyday life of the disabled by using the engineering principles learned in classes. During the 2014-15 school year, the club worked on two design projects and hosted two design competitions and one industry advisor talk.

One of our design projects involved designing and creating prototypes for a drinking aid for a client with Duchenne muscular dystrophy. Our design competitions challenged students to create assistive devices over an allotted period of time. Examples of the prototypes designed include: door unlocking device, automated urine disposal system for wheel-chair users, and sip and puff remote control apparatus for those with reduced hand mobility. All of these designs were assessed by physically disabled individuals as well as professors and researchers with a background in biomedical engineering. We also invited Om Bhatt, from InteraXon, a recent graduate working in the biotechnology industry, to give a presentation about his career to inspire students to continually improve the health and life of the disabled.



A volunteer with reduced hand mobility tests a sip and puff remote control

The club's primary expenses were prototype supplies and materials, refreshments, prizes, and thank you gifts for the competition judges. Many fund providers restrict the use of their funding for prizes and gifts, but thanks to Engineering Alumni Association, we were able to further motivate students to participate in the design competitions and express our appreciation to the volunteer judges. We would like to thank Engineering Alumni for supporting our initiative to alleviate some of the burden of the disabled community.

The Operations Research Challenge (TORCH)

AMOUNT FUNDED: \$1,000

The Operations Research Challenge (TORCH) is a free one-day event for high school students held annually. Organized by U of T engineering students, the goal of TORCH is to garner interest in operations research (OR), a field that aims to understand and solve complex decision-making problems through the use of techniques from engineering, computer science and mathematics. During the competition, high school teams worked in teams of three/four to solve a variety of OR-related questions.

This year's competition took place on March 21st and involved 41 volunteers. Questions and topics included: optimizing pizza production to maximize the number of satisfied customers and finding the best schedule for periodic maintenance of an electricity network. The competition was followed by introductory lectures on OR, a panel discussion by MIE students, and an awards ceremony. A team from Woburn Collegiate Institute shared the top prize of \$300; each member of the winning team was also awarded a free week at DEEP Summer Academy.

Thanks to your generous funding, we were able to increase the number of participants from 95 to 140. Without the support of SKULE Alumni, TORCH would not be the success that it was and we would not have been able to expose as many students to OR as we did.

U of T Engineering Chinese Club

AMOUNT FUNDED: \$500

Engineering Chinese Club aims to enrich students' undergraduate experience through various academic, athletic and networking events. This year, ECC held four academic events: PEY seminar, interview seminar, grad school seminar and research seminar. We also hold athletic events such as the ECC basketball tournament and the ECC pool tournament. Our roster of networking events include the ECC Social Night and the ECC Chinese New Year Party.

As the ECC recognizes the Engineering Alumni Association as a great and valuable resource, alumni are invited to many of our events to network with members of the club. Alumni also volunteer in their capacity as speakers at professional seminars to share their experiences and provide professional advice to members.

U of T Aerospace Team (UTAT) - Division of Space Systems

AMOUNT FUNDED: \$1,000

The University of Toronto Aerospace Team (UTAT) is an interdisciplinary design team focused on innovative aerospace design and educational outreach. We have five divisions - Powered Flight, UAV, Rocketry, Space Systems and Outreach – specializing in remote-controlled planes, autonomous drones, hybrid sounding rockets, small satellites and community engagement initiatives.

Funding from Engineering Alumni Association was instrumental in providing equipment for our newest division, Space Systems. Within the next two years, Space Systems's CubeSat 3U micro-satellite – carrying a microbiology experiment – will be launched into orbit from aboard the ISS. If successful, the experiment may very well break new grounds in how microgravity medicine is conducted in the future.

UTAT has also exploded in our other divisions: Powered Flight's latest plane, the Blue Archer II, flew at SAE Advanced Class competition and placed 7th place among nearly 80 competing teams; Rocketry's "Eos II" launch vehicle won the R. Gilbert Moore Award for Innovation and the division has designed a new hybrid rocket engine; UAV has successfully flown a number of test flights with their autonomous composite-fabricated drone and developed a larger, more robust fuselage; and finally, Outreach spearheaded the "Aerospace Research Challenge (ARC)", a new program in which our Rocketry and Space Systems divisions are mentoring four high school students in developing a scientific payload to be launched to 10 000 ft using Rocketry's launch vehicle.

Due to funding from EAA, industry-grade materials, specialized equipment and competition expenses are no longer a burden, but rather an opportunity to provide students with immersive experience that makes UTAT and U of T at large an excellent destination for ambitious thinkers and doers.

U of T BIOMOD Team

AMOUNT FUNDED: \$500

2014-15 was the first year of operation for our team and has been successful. We are well on track to meet our goal of participating in the BIOMOD jamboree, a bio-molecular design competition held annually at the Wyss Institute at Harvard University. We have been fortunate in securing two staff advisors – Dr. Christopher Yip and Dr. Warren Chan, who have helped us tremendously in guiding our ideas into a feasible project.

At the end of January 2015, we held our first general meeting in which we discussed our team's goals and the BIOMOD jamboree project. This year's project involves the encapsulation of gold-nano particles inside a DNA origami box. Your generosity was instrumental in securing our spot in the competition. For the summer term, the team has divided into two groups: research and marketing. The research group will focus on the feasibility and experimental procedures needed in the wet labs. Our aim is to have members in the CCBR wet labs by mid-May. The marketing/tech team will focus on team visibility and promotion.

We are glad and grateful to have received support from the Engineering Alumni Association, allowing us to reach out to the Skule community and gather such a committed group of students.

U of T Destination Imagination

AMOUNT FUNDED: \$2,000

University of Toronto Destination Imagination would like to express our sincerest gratitude for your generous donation and support this year. Your contribution not only helped send the team to Global Finals in Knoxville, Tennessee, but also assisted the teams in funding two-award winning performances.

Competing against international university level teams in two challenges in the areas of technical design and structural design, U of T brought home two gold medals and a first place instant challenge award. With your support, U of T DI awed judges and audiences alike with our creative solutions to the challenges that included: an intricate giant cuckoo clock with rotating gears; a mechanical bird that flapped its wings, flew from side to side, flipped switches and sang a tune; a 20 gram structure made of balsam wood and playing cards that held a pressure board while 68% of its mass was removed; as well as entertaining performances, captivating songs and elaborate costumes.

Our teams, once again, thank you for your generosity in supporting the growing U of T Destination Imagination program. We look forward to your continued support next year.

U of T Emergency First Responders

AMOUNT FUNDED: \$1,500

The U of T Emergency Response team is a fully volunteer-run first aid team consisting of students. Funding from the Engineering Alumni Association represents our largest source of funding and is crucial to the maintenance and growth of our club.

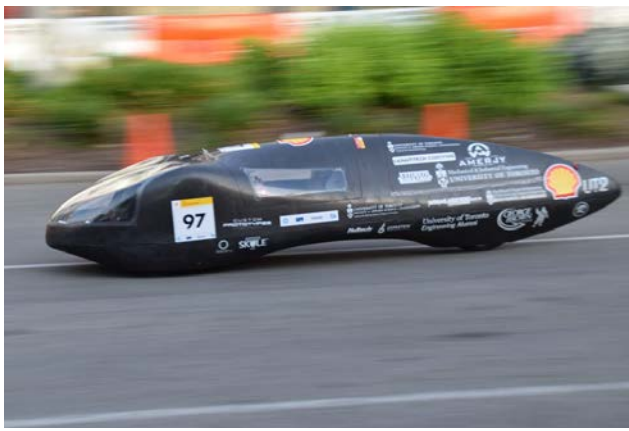
This year, we participated in the Saturday Workshop program, a high-school program aimed at teaching university level engineering skills. Funds were used to purchase training equipment for the workshop. As our team expands, we purchase new uniforms and equipment to outfit new members of our patrol team. We were also able to replenish equipment which is critical to the success of our patrol team. This year, our patrol team was present at numerous engineering frosh week events. Additionally, we were able to send two of our members to participate in MIXER, the annual first aid competition run by the Association of Campus Emergency Response Teams of Canada. Attendees interacted with our counterparts from across Canada and shared ideas on the newest first-aid procedures as well as team management.

With your sponsorship, UTEFR continues to organize educational first-aid workshops for the public. This is beneficial to the Skule community as well as the U of T community at large in promoting community safety and providing a means of building teamwork and decision making skills.

U of T Supermileage Team

AMOUNT FUNDED: \$7,500

As a relatively new club with an emerging reputation in the industry, the Supermileage Team relies heavily on monetary support from faculty and university affiliates such as the Engineering Alumni Association. Your support has helped us to meet our goal of promoting awareness for eco-friendly fuel economy in the design of our “super-mileage” vehicle.



U of T Supermileage gasoline prototype vehicle on the track at the Shell Eco-Marathon Americas in Houston, Texas

This April, our team travelled to Detroit, Michigan to compete for the third time in the globally recognized Shell Eco-Marathon. The aim of the event is to promote awareness of fuel efficiency by challenging design teams from universities and high schools around the world to develop, build and drive ultra-efficient vehicles. This year we were able to achieve an efficiency of 3420 miles per gallon with our gasoline prototype vehicle. Not only did we increase our efficiency from the previous year by 708 miles per gallon, we also won first place in our category.

Funding from the Engineering Alumni

Association continues to be a major asset to our

team. The focus for the next term will be on the design and fabrication of a second vehicle to compete in the Shell Eco-Marathon Americas competition in 2016. This vehicle will compete in the battery electric prototype category – the second largest in the competition. Funds provided have therefore been budgeted for the purchase of a motor and tires as well as fabrication of carbon fibre rims and a new aerobody mould.

Our achievements would not have been possible without the on-going support that the Engineering Alumni Association provides. On behalf of the University of Toronto Supermileage Team, thank you again for supporting our initiative and promoting sustainability and fuel efficiency in the U of T community.

U of T Concrete Canoe Design Team

AMOUNT FUNDED: \$2,000

Due to your generous support, the Concrete Canoe Team has been able to compete at an increasing number of events. In addition to the Canadian National Concrete Canoe Competition (CNCCC) (which the team has been attending annually since 1995), we have recently added the Ready Mix Concrete Association of Ontario (RMCAO) convention and Les Courses en Folie in Gatineau, QC to our calendar. This past year, we competed and ranked impressively at 4th, 1st and 3rd place overall at CNCCC, RMCAO and Les Courses en Folie, respectively. We also received the lightest canoe award at CNCCC, with a weight of 50kg (which was only a fraction of many other teams' canoes).



Concrete canoe team pictured with canoe at the Canadian National Concrete Canoe Competition 2014 in Sherbrooke, QC

Each additional competition provides the paddling team with more racing experience, and allows the technical team to learn about construction techniques and analysis methods used by other teams. Funding from Engineering Alumni Association allows us to keep the cost of attending these competitions low for our members and encourages greater participation.

U of T Business Association (UTBA)

AMOUNT FUNDED: \$3,000

University of Toronto Business Association focusses on introducing students to different business opportunities and business related jobs in various industries. In its first year, the UTBA has organized monthly speaker series during which students had the opportunity to meet with industry professionals and expand their network. The club has grown to an executive team of over 17 people across the University and about 350 members. We could not have accomplished this without funding provided by Engineering Alumni Association. The funding is also important in terms of the broader engineering community as it provided valuable networking opportunities to students. According to the feedback we received, students were happy to have joined and to have the opportunity to grow professionally by stepping out of their comfort zone and meeting industry leaders.

U of T Engineering Kompetition

AMOUNT FUNDED: \$2,500

This year's University of Toronto Engineering Kompetition (UTEK) was a great success by being the largest undergraduate engineering competition at U of T. It was held across two days for the first time as opposed to one for students across all disciplines. The winners of this competition will be participating in Ontario Engineering Competition and potentially the Canadian Engineering Competition.

The competition has seen substantial growth over the past few years by having around 400 students participate in the seven competition categories. We are continuously growing participation to benefit as many students as possible through specialized and targeted career networking opportunities, additional participation in minor competitions, and systematic improvements to the feedback, judging and overall quality of organization.

UTEK provided students with an opportunity to integrate their knowledge and problem solving skills on current technological issues. It enhances a variety of skills (such as leadership, communication and critical thinking) which are all essential for overall career development. Students also received valuable feedback from experienced judges, giving them a professional perspective to contextualize their experiences at university.

This year, UTEK also served as a bridge connecting students to the real world. It emphasized interaction between students and their community and provided valuable professional development experience. For younger students who are still looking for opportunities to make an impact, this concentrated two day event served as a catalyst for their contributions in the future.

U of T Human-Powered Vehicle Design Team

AMOUNT FUNDED: \$750



Members of the HPVDT at the 2014 World Human Powered Speed Challenge at Battle Mountain, Nevada. From left: **Prof. Jun Nogami, Trefor Evans, Sherry Shi, Calvin Moes, Marc Jutras, Todd Reichert, Thomas Ulph, Peter Wen, Alex Selwa, Cameron Robertson**

our faired recumbent leaning tricycle, Valkyrie. Our success was largely due to our innovative and practical design approach in which we integrated the stability of a tricycle and the agility of a bicycle into the same vehicle.

Throughout the summer, the HPVDT team attended several HPV races including the Michigan Human Powered Vehicle Rally and the Northbrook/Kenosha WISIL Recumbent Racing Weekend. These were casual race events which gave team members an opportunity to gain experience in our vehicles and meet others from the HPV community in North America.

We hope to continue to reach new heights in the 2015-2016 school year. Our achievements would not have been possible without funding from the Engineering Alumni Association.

The Human-Powered Vehicle Design Team (HPVDT) is a student club focussed on the design and construction of innovative, high performance, human-powered vehicles (HPVs). Funding for our team is allotted for two primary purposes: 1) parts and materials to fabricate test specimens and the vehicle itself and 2) to cover the costs of attending competitions and conferences.

This year, we placed 7th overall at the ASME Human Powered Vehicle Challenge out of over 30 teams from across North America with

U of T Ironsports Club

AMOUNT FUNDED: \$200

The University of Toronto Ironsports Club would like to thank Skule Alumni for their contribution of \$200. Our club has now grown to now including over 300 students and alumni. We have also grown to include competitive weightlifting and powerlifting teams in addition to our recreational membership. The sponsorship provided by Skule Alumni helped to fund our Open Training Day events in September and October. These events were designed to foster community among U of T student and alumni lifters of varying academic disciplines and lifting experience. A combination of instruction, practice and pushing for new personal records in lifts in a supporting environment helps students keep up with regular exercise regimes, manage stress and build self-confidence.

We would like to thank Engineering Alumni Association for their continued support of U of T Ironsports. Thank you for providing our members with the opportunity to find their strength outside of the classroom.

U of T Robotics Association

AMOUNT FUNDED: \$8,000

U of T Robotics Association is a student club formed with the mission to design and build robots to compete at internationally recognized robotic competitions and the vision to cultivate and inspire future leaders in the field of robotics. UTRA's scope of projects includes sumo robot, autonomous robot, and a 3D RepRap printer. We provide hands-on training sessions for students to learn the basics of various practical engineering skills, including soldering, circuit design, micro-controller programming and machining. UTRA also started the Mini-Sumo Robot Competition to introduce junior members to autonomous robotics. The competition is an excellent avenue to help students learn the basics and graduate to our larger robots that compete internationally.

All of the aforementioned projects require substantial funding, and we are always engaged in new initiatives for projects and competitions. UTRA has recently started a pilot project where robots are built to gain traction in other facilities within the University. Ideally, we gain face and build interest among students outside of the engineering facility. We have also been involved with student outreach and getting kids involved in robotics pre-university. All this is possible thanks to your generous funding. We are extremely grateful to be able to have the funds to use our knowledge and compete at a global level. Thank you.

U of T Engineering Toastmasters

AMOUNT FUNDED: \$300

On behalf of all members of University of Toronto Engineering Toastmasters (UTET), thank you for your continued support. We truly appreciate the financial support that helps us to make our club community stronger. As a club that improves the communication and leadership skills of students within the faculty, there are many reasons why our initiatives are important. Your funding this year was used for a variety of events (elections, speech contest, etc) and various operational costs (promotional materials, club banner). We aim to provide equal opportunities to all our members and reimburse costs incurred for Toastmaster International.

Overall, UTET provides a positive, supportive and fun environment for members to have cross-disciplinary social interactions and to hone their soft skills simultaneously. Along with social events, our club is an excellent medium for students to establish a sense of community within the engineering faculty and on campus.

Water Environment Association of Ontario (WEAO)

AMOUNT FUNDED: \$500

The purpose of the Water Environment Association of Ontario – U of T is to promote student interest in the water environment and to provide an avenue for professional development and exchange of information between chapter members and members of the WEAO. We liaise with WEAO through the WEAO Young Professionals Committee, for training and for the coordination of various events.

Thanks to funding provided by Engineering Alumni Association, we were able to host several events during the 2014-15 school year which included: 2 seminars (Resume/Interview Seminar and Water, Innovation and Technology), panel discussions on Water, Environment and Sustainability and Water, Life, and Challenges. In collaboration with the SEA, we also hosted a field trip to the Humber Wastewater Treatment Plant in which 20 students learned about different processes of wastewater treatment. The field trip was a great success and it boosted our members' interest in the club and the industry as a whole.

Thank you for your continuous support.

Women in Science & Engineering

AMOUNT FUNDED: \$7,000

Although WISE UofT has multiple initiatives, our main expense each year is the annual conference that the club organizes. The third annual WISE National Conference was held on March 21st-22nd, 2015 at the Metro Toronto Convention Center. The theme of the conference was "Build Your Own Legacy". There were a total of 181 registered delegates (students) and approximately 40 industry attendees from various sponsors.

The conference included a career fair. Companies/Departments involved in the career fair included General Electric, Accenture, Altera, TD Bank, Graduate studies at UofT and Graduate Studies at McMaster. The conference also included workshops, fireside chats, and two competitions: Social Innovation and a poster competition. The workshops focussed on professional development: Teamwork Dynamics, Career Mapping 101 (both presented by General Electric), and Digital Branding presented by Accenture.



WISE Exectutive Team at the 2015 conference

There were keynote speakers throughout the weekend, as well as a panel involving entrepreneurs of start-up companies. Keynote speakers included Anne Sado, President of George Brown College, and Diane Freeman who is a manager with Conestoga-Rovers & Associates Limited and a councillor for the city of Waterloo.

Funding granted to us by the Engineering Alumni Association allowed us to bring in the resources needed to have a successful WISE conference. We learned a lot from this experience and exercised values of leadership, teamwork, and conference planning. We are grateful for the support and encouragement and will continue to work hard to deliver purposeful and successful events for our audience.

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Bridges to Prosperity	b2p.uoft@gmail.com
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Canadian National Concrete Canoe Competition Organizing Committee 2015	cnccc2015@gmail.com
Canadian Society for Chemical Engineering	csche@skule.ca
Chinese Engineering Students Association	info@cesa.skule.ca
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