



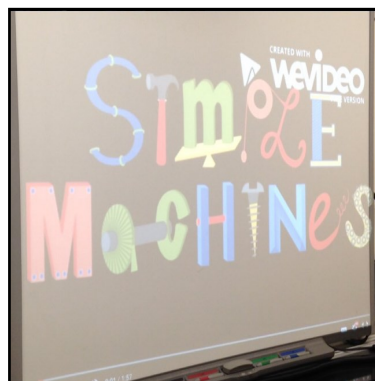
A publication providing the latest STEM events and information within Glenforest Secondary School.

Inside This Issue:

<ul style="list-style-type: none"> Perfect Score at Computing Competition 	2
<ul style="list-style-type: none"> STEM at Mississauga City Council STEM at CPA Ontario Leader of Tomorrow Award 	3
<ul style="list-style-type: none"> WearHack Hackathon Winners STEM Meets MP Peter Fonseca 	4
<ul style="list-style-type: none"> STEM meeting with Minister of Science Gold at Canada Wide Science Fair Winners of Waterloo Euclid Math Contest 	5
<ul style="list-style-type: none"> Glenforest Team Wins First Robotics Competition Young Conservationist Award Glenforest Ranks high in National Biology Competition 	6
<ul style="list-style-type: none"> Glenforest Ranks high in Waterloo Sir Isaac Newton Exam 1st placement in OBFA Accounting Contest Student Engineering Conferences STEM at Cisco 	7
<ul style="list-style-type: none"> Winners of Biomimicry Global Design Challenge STEMposium 2016 	8
<ul style="list-style-type: none"> Glenforest student wins Google Code-In 2015 Successes and awards of Glenforest student 2016 Peel Student Film Festival Winner STEM Director of Booths at Yale Global Scholars Program 	9
<ul style="list-style-type: none"> STEM Meets Mississauga Mayor and Councillor STEM at SHAD STEM at IB Conference of Americas 2016 	10
<ul style="list-style-type: none"> Planning Updates for Youth STEM Conference 2017 	11
<ul style="list-style-type: none"> Stem Newsletter Team Contact Us 	

STEM Olympics

(January 2016) Glenforest STEM team organized STEM Olympics for grade 4 students from Forest Glen Public School. It hosted 3 workshops that provided the junior students an interesting and interactive way to learn about their science curriculum. For example, one workshop was about simple machines and the grade 4 students were placed into groups to complete tasks in different sections such as pulleys and gears.



Grade 10 Glenforest Student Received a Perfect Score on the Canadian Computing Competition

(February 2016) Grade 10 Glenforest student Yashan Chelliahpillai had a perfect score competing in a challenging contest for secondary students to test their skills in designing, interpreting, and applying algorithms.



STEM at Soft Skills Workshop by Chartered Professional Accountants of Ontario



(April 2016) STEM executive team travelled to CPA Ontario's downtown Toronto location. Lydia Harper of CPA Ontario delivered an excellent workshop on Soft Skills for the STEM team.

Glenforest STEM Presentation at Mississauga City Council

(March 2016) On March 9, 2016, Glenforest STEM presented at Mississauga City Council. The core five executives Twinkle, Jane, Marah, Gabriel and Simone delivered an excellent presentation and gained the support of Mayor Crombie and many City Councillors while STEM photographer Jacob took pictures. The core executives highlighted STEM's successes and spoke about their hopes for the 2017 Conference.



STEM's Social Media Director Receives Leader of Tomorrow Award

(April 2016) STEM's Social Media Director Ghaid Asfour was awarded the Leader of Tomorrow Award by Volunteer Mississauga-Brampton-Caldeon (MBC). Ghaid began volunteering as a tutor for math and English in low income areas, acting as a role model for many children. She then decided to combat what had haunted her childhood: bullying, by working hard both on social media and as a public speaker to raise awareness about the issue.



STEM Vice-President and Glenforest student wins Cossette Health's Challenge at Wearhacks Hackathon

(March 2016) Gabriel Yeung, Vice President of Glenforest STEM and Glenforest grade 12 student Bruno Almeida attended the WearHacks Hackathon. They won the challenge and were given the opportunity to further develop their project. Wearhacks is a non profit organization that runs large scale hackathons to make hardware education attainable and affordable. Bruno and Gabriel created a community impacting mobile app for SickKids Hospital and developed solutions to real world problems.

Gabriel Yeung states, "Hackathons are slowly becoming more and more popular. Recently, I was given the opportunity to participate at WearHacks 2016. At the event, my partner and I were issued a challenge to develop a mobile application for SickKids Hospital using tech gear. Within 36 hours, we developed a mobile app and a wearable prototype that uses Estimotes Beacons to help patients navigate the hospital. At the event, we met executives from tech companies and mentors who gave us suggestions on how we can improve our startup idea as well as tips to potentially sell our app to the judges. At WearHacks, we met kids as young as 12 learning to develop software and hardware. These young kids are the future of our society. We need more hackathons to spark more bright ideas into the minds of youth in our generation."



STEM Executives Meet with MP Peter Fonseca



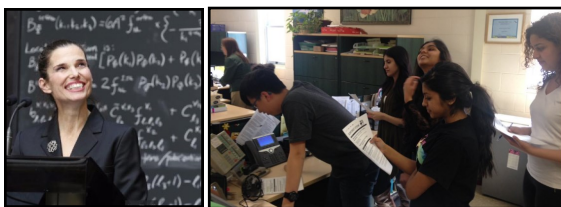
(March 2016) Glenforest STEM students continued their community outreach initiatives with a meeting with MP Peter Fonseca. Five STEM members were in attendance at this meeting: Jane Jomy (Co-President), Twinkle Mehta (Co-President), Simone Aria (Vice President), Uvraj Sandhu (Director of Finance) and Rachel Zlater (Director of Booths). Students highlighted the successes of the Xperience STEM Conference 2015 and discussed their plans for the 2017 Youth STEM Conference. MP Fonseca encouraged the team and provided the team with resources and information to help with the 2017 conference planning.

Did you know? **Facts**

Almost 4 in 5 post-secondary students who are pursuing a STEM-related degree say they decided to go into their field in high school or earlier.

Phone Meeting with Minister of Science Kirsty Duncan

(April 2016) Glenforest STEM was excited to speak with Minister of Science, Hon. Kristy Duncan during a phone meeting on April 5, 2016. The meeting was attended by the team's Core 5 Executives, Jane Jomy, Twinkle Mehta, Simone Aria, Marah Abdelkader and Gabriel Yeung along with teacher advisors Diana Wang-Martin and Daphne Habib. STEM is grateful to have the opportunity to connect with so many wonderful and experienced individuals who support our conference and team.



Glenforest Grade 10 Students Awarded Gold Medal at the Canada-Wide Science Fair 2016



(April 2016) Abhinav Boyed (STEM Director of Communications) and Karthik Prasad are Grade 10 students who were awarded a gold medal at the Canada-Wide Science Fair 2016 in the Intermediate category. This competition is the highest level of science fair competition in Canada, and the CWSF grants students the opportunity to display

their achievements in the science field alongside the top students in Canada who share the same passion for science and technology. Abhinav and Karthik first competed in the regional science fairs. They received top positions in the regional science fair in their category and they were of the few selected to be eligible to compete at the CWSF.

Seven Glenforest students win University of Waterloo Scholarships via Euclid Math Contest

(April 2016) In April 2016, over 90 students at Glenforest in grades 11 and 12 wrote the Euclid Math Contest. Seven students in grade 12 received scholarships from the University of Waterloo: Weiwei Zhong, Saswapta Gupta, Martin Lui, Melody Huang, Nathan Jiang, Bruno Almeida, and Bill Zhu. Six of the grade 11 students would have qualified for the scholarship if



Did you
know

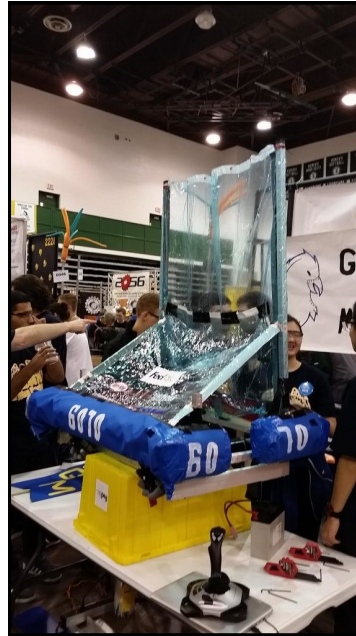
Facts

STEM jobs are growing at 1.7 times the rate of non-STEM jobs.



Team 6070 - Glenforest Robotics Team Receives the Rookie All Star Award at the FIRST Robotics Canada Competition

(April 2016) Team 6070 - Glenforest Robotics Team received the Rookie All Star award at the FIRST Robotics Canada Competition. They headed to FIRST Robotics INTERNATIONALS and as a rookie team, they demonstrated a new but collective effort, forming a partnership that propelled them to achieve this award. They applied and carried out the missions of "For Inspiration and Recognition of Science and Technology" (FIRST) to motivate students to discover more about science and technology. This year 3128 teams with 75,000 students from 24 countries, competed in 53 regional competitions and 8 district championships. In the end, 600 teams were awarded with the opportunity to attend the FIRST Championship tournament, with Glenforest's Team 6070 being one of them.



Tiger Kong, a grade 11 Glenforest student who is also the trainer for the school's computer science club, Vice President of Science club, and lead programmer and drive coach for FIRST Robotics Team 6070 states "Since I was a toddler, I've always been curious about the world, and STEM, especially computers, math, and physics, fascinated me with the never-ending quest to simplify down the universe into rules and patterns; simulations that explain daily phenomenon. As humanity inevitably progresses, STEM will have a continuously growing impact on both individuals and societies around the globe."



Young Conservationist Award

(April 2016) Rana Al-Fayez STEM Director of Guides was awarded the Young Conservationist Award from the Credit Valley Conservation group. The award recognized Rana's personal commitment to improve environmental awareness among youth and her ongoing support and leadership in organizing stewardship events at Creditview Wetland. For over 5 years, Rana has participated in a variety of initiatives with Credit Valley Conservation, including yearly cleanups, tree planting volunteer work, and helping to stronghold the annual Bog Fest. Rana is also a committee member of the Credit Valley Stewardship Committee, which works to organize the Bog Fest and aims to educate people of all ages about the local watershed.

Did you know? **Facts**

80% of jobs in the next decade will require technology skills.

National Biology Competition

(April 2016) Forty four Glenforest biology students competed in the National Biology Competition. The combined scores of the team ranked Glenforest 13th out of 263 teams. Nabieva and Yan Yan Tran who both earned the status of National Biology Scholars as they were in the top 50 of over 3200 students.



UNIVERSITY OF
TORONTO

National Biology Competition

University of Waterloo Physics Competition

(May 2016) The SIN exam is a test of high school physics and is offered by the Department of Physics at the University of Waterloo. The first SIN exam was run in 1969, and about 1,500 students from about 300 high schools took part.

In recent years the number of students has quadrupled and the number of participating high schools has more than doubled. Students also now participate from across Canada, and a few from the USA and abroad.

Glenforest's top scorers:

Martin Liu: top 100

Wei Wei Zhong: top 6%

Amar Arefeen: top 17%

YanYan Tran: top 17%

Frank Shi: top 17%

Ahmad Sabie: top 17%

SIR ISSAC NEWTON EXAM



UNIVERSITY OF
WATERLOO



The Ontario Business Educators' Association Accounting Contest



(April 2016) The Ontario Business Educators' Association was established in 1895 with a mission to contribute to the professional growth of business educators and to respond to needs expressed by members. To accomplish this, OBEA provides two conferences each year, one in the Fall which rotates around the province and the Spring conference, held in Toronto. Workshops are offered to teachers across the province who wish to expose themselves to new ideas, new technology, new books, anything that will provide for more instructional material and individual insight specific to their student's needs.

STEM Finance Director Uvraj Sandhu placed 1st in the for all grade 11 students provincially and Glenforest student Tony Liu placed 3rd for the province-wide grade 12 group.

STEM Finance Director Uvraj Sandhu placed 1st in the for all grade 11 students provincially and Glenforest student Tony Liu placed 3rd for the province-wide grade 12 group.

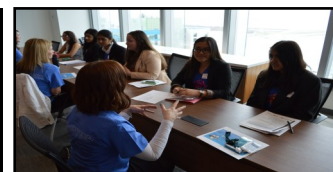
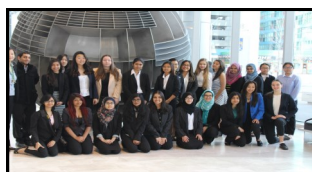
Student Engineering Conferences

(May 2016) STEM's Director of Registration, Janna Moselhi, and former STEM executive, Melodie Li, were chosen amongst 50 female high school students for the three days Catalyst Engineering program at the University of Waterloo. Janna and Melodie attended lectures by Waterloo professors and students, participated in engineering workshops and a Design Challenge. Janna also attended the Engineering Social Change and Youth Leadership Conference at the University of Toronto. Janna worked with two other students on their STEM case, "Technology in developing societies", created a business plan presented their case. Janna's team received 1st place for their STEM Case.



STEM at Cisco Women in Technology Event

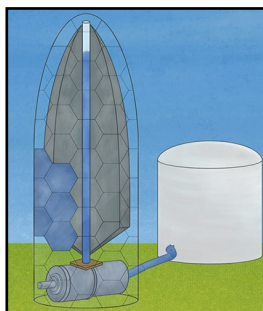
(May 2016) The ladies of Glenforest STEM attended the Women in Tech Event at Cisco in Toronto. They celebrated International Girls in ICT Day in an effort to empower young women to consider studies in Information and Communication Technologies. STEM students participated in activities such as Speed Mentoring and Technology Escape Room. At the beautiful Cisco Toronto Office the STEM ladies also heard inspirational, empowering and motivational talks by female Cisco professionals.



Winners of the Biomimicry Global Design Challenge

(June 2016) Earlier this year STEM Co-President Twinkle Mehta, STEM director Leslie Xin, four of their peers from Glenforest, Omolara Soyinka, Kate Sanchez, Amy Lu and Katherine Woods and team mentor, Mr. John Troina, entered the Biomimicry Global Design Challenge (BGDC). This challenge was an opportunity for university and high school students around the world to present an innovative solution to issues in our current food system. With a four month period to brainstorm, plan, prototype and present a solution the team, Cact Inc., decided to solve the issue of water scarcity and availability in areas of drought. The product, Stillæ, was an atmospheric water generator that, using the water collected, could be used to irrigate crops. After months of research and construction of the prototype, the team submitted their product pitch. Judges from around the world who are professionals in the fields of agriculture, business, urban planning and industrial design evaluated all submissions and, in June, announced Cact Inc. as the first place winners in the student category and were awarded \$3000 for their accomplishment. The team represented Canada on the international stage and were thrilled to have been selected. The team has learnt a lot

about food systems and will continue to develop their product to be more sustainable and viable to implement in the future.



STEMposium 2016



(June 2016) For a STEM education event for youth in the community, Glenforest STEM hosted *STEMposium* for the grade six students at Bristol Road Middle School. Middle students participated in:

- Little Coders Coding workshops – facilitated by Glenforest Computer Science Club
- Little Engineers workshops—facilitated by Glenforest FIRST robotics team.
- Little Scientists Science workshops – facilitated by Glenforest Science Club
- Little Mathematicians Math workshops– facilitated by Ms. McLaren, staff advisor of Glenforest Math Club
- Interdisciplinary Workshops – facilitated by Glenforest Alumni
- Speakers Panel –Councilor Chris Fonseca was a guest speaker at the Opening Session.

STEM received an overwhelmingly positive response from both the Bristol students and staff.

Glenforest Student Wins 2015 Google Code-In

(June 2016) Ahmed Sabie, a grade 12 Glenforest student is a Grand Prize Winner of the Google Code-in 2015 coding competition. 980 students from 65 countries competed in the competition.

Ahmed is one of 28 students, and the only Canadian to be granted an opportunity to visit Google's California campus and to meet Google engineers.

He states, "I enjoy STEM because of its emphasis on problem solving. You take a set of rules and patterns, and extend them to any new situations that you come across. STEM, and computer science in particular, has been a source of self development and life changing opportunities for me. I got seriously involved with coding, which eventually led me to be one of the grand prize winners for Google Code-In, an open source development contest for high school students. STEM is important because it is the future; it leads economic growth, and progresses society and technology as a whole."

Glenforest's Rohit Sangaraju's Many Successes in Science Fairs

(June 2016) Rohit Sangaraju is Glenforest's grade 12 student and a very successful Science Fair participant. He is:

- The **5 Minute Science Fair Grand Prize** winner of \$2000 USD hosted by George Washington University and the International Society for Performance Improvement. The project is shown in the video from this competition: <http://wesharescience.com/Science-Fair-Winners>
- A top 30 candidate of Team Canada of Intel **International Science and Engineering Fair** (Intel ISEF). Intel ISEF is the world's largest international pre-college science competition.
- The **Peel Region Senior Division Science Fair 1st Place Gold Medalist**. He won a cash prize of \$160 and University of Ottawa Entrance Scholarship of \$1000
- **Canada Wide Science Fair Senior Silver Medalist** and winner of \$8,500 in scholarships to assorted universities.

Rohit will be heading to Mechatronics Engineering this September at the University of Waterloo. He plans to pursue a future as an engineer or researcher.

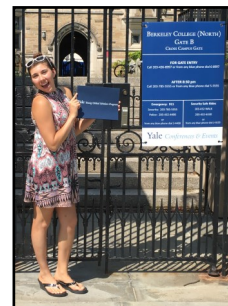
2016 Peel Student Film Festival

(June 2016) Former STEM executives Omolara Soyinka and Ibrahim Issa had their films screened at the Rose Theatre as official selections in the 2016 Peel Student Film Festival. Both Omolara's and Ibrahim's films were nominated for awards in separate categories, Animation and Commercial respectively. Ibrahim won 3rd Place in the very competitive Commercial category.



STEM Director of Booths at Yale Global Scholars Program

(July 2016) STEM's Director of Booths, Rachel Zlatar, attended the Yale Young Global Scholars Program for Biological and Biomedical Sciences at Yale University in Connecticut, USA this July. Rachel attended intensive lectures and seminars by Yale professors discussing current research in HIV/AIDS, the neuropharmacology of Nicotine addictions, and evaluating Health Policy. Rachel worked with a group of students to create a research presentation on "The Effects Artificial Sweeteners have on Metabolic Homeostasis, Neurological Function and Cancer in Humans". She hopes to continue this research to develop a plan to prevent the wide-spread effects of artificial sweeteners.



STEM Meets with Mississauga Mayor Bonnie Crombie and Councillor Chris Fonseca

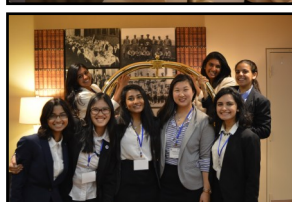


(June 2016) Being proactive in its community, Glenforest STEM met with Mississauga Mayor Bonnie Crombie and City Councillor Chris Fonseca. STEM's past initiatives and the team's plans for the future were discussed during the meeting. STEM Co-President, Jane Jomy, Vice Presidents, Marah Abdelkader and Gabriel Yeung, Directors, Rebecca Lee, Janna Moselhi and Sara Imam, STEM teacher advisors Diana Wang-Martin and Rachel Luke were in attendance.

International Baccalaureate Conference of the Americas Xperience STEM Session

(July 2016) Youth are often misjudged to be immature and irresponsible; Glenforest STEM strives to defy this stereotype with our professionalism and confidence whenever provided the opportunity to do so. From over 200 applications, our STEM team was selected to present and facilitate a workshop at IB Conference of the Americas in the afternoon of Saturday, July 16, 2016. Six current STEM team members, two STEM alumni along with teacher advisors Ms. Diana Wang-Martin and Ms. Anya Marin attended the Conference in Toronto, Ontario.

Jane Jomy (Co-President), Janna Moselhi (Director of Registration), Kriti Madan (Director of Merchandise), Neha Naeem (Assistant Director of Artistic Media), all heading into their senior year at Glenforest, were session speakers and thereby spoke on the importance of Glenforest STEM as an experience for youth to build skills such as collaboration and communication while Sara Imam (Director of Photography) and Kim Nguyen (Artistic Media Associate) photographed and filmed the session. Kathy Huang (former President) and Ananya Nair (former Vice President), both going into their second year at McMaster Health Science, also spoke about STEM's genesis at Glenforest. The students shared their experiences as IB learners inspiring youth to become future STEM leaders at the largest student-run STEM Conference in Canada, Xperience STEM 2015, organized by students for students, with 2000 attendees and participants.



STEM at SHAD

(July 2016) What is SHAD? SHAD is a prestigious and highly coveted program that addresses all areas of STEM and developing entrepreneurial spirit in the form of a design question posed to solve some of Canada's most complex problems. Each year, 12 Canadian universities host 700 students from all provinces/territories for a single month during the summer.

This year eighteen Glenforest student were accepted to the program. Of the 18 students, 9 are current and former STEM executives. They include: Twinkle Mehta—Co-president, Simone Aria - Vice President, Marah Abdelkader - Vice President, Uvraj Sandhu - Director of Finance, Vardan Sawhney - Director of Contests, Abhinav Boyed—Director of Communications Julianna Clarke - 2015 Co-President, Uswa Zahoor 2015 Executive, and Nicholas Gondzik 2015 STEM Executive.

SHAD
UNCOMMON PURPOSE

PlanningUpdate

Youth STEM Conference 2017

Glenforest STEM is seeking sponsorship and support for its Canada-Wide STEM 2017 Conference.

Conference Details:

Date: May 25th, 2017

Location: Pearson Convention Centre in Brampton, Ontario

1000 student delegates from grade 6 to grade 11.

Hands-on workshop opportunities for all delegates

STEM speakers panel – speakers to speak about their education and career

Speed Mentoring Session with STEM professionals

Please contact Diana Wang-Martin, teacher advisor of Glenforest STEM if your organization is able to support this exciting event - diana.wangmartin@glenforeststem.com

YOUTH STEM CONFERENCE 2017

SPONSORS

Power Contributor



Silver Sponsors









Bronze Sponsors

















Organized and Hosted By
Glenforest STEM
glenforestSTEM.com



Confirmed Sponsors—As of August 4, 2016

GLENFOREST STEM

STEM NEWSLETTER TEAM

Design and Artistic Layout

Megan Park (Director of Artistic Media)

Writer

Carl Zhou (Director of Newsletter & Marketing)

Article Contributors

Jane Jomy (Co-President)
Twinkle Mehta (Co-President)
Gabriel Yeung (Vice-President)
Ghaid Asfour (Director of Social Media)
Vardan Sawhney (Director of Contests)
Rana Al-Fayez (Director of Guides)
Rachel Zlatar (Director of Booths)
Janna Moselhi (Director of Registration)

Assistants

Marah Abdelkader (Vice-President)
Simone Aria (Vice-President)
Abhinav Boyed (Director of Communications)
Christa Hu (Director of Technology)
Diana Wang-Martin (Teacher Advisor)

CONTACT US!



www.glenforeststem.com



info@glenforeststem.com



[@GFSS_STEM](https://twitter.com/GFSS_STEM)



[/STEMITUP](https://www.facebook.com/STEMITUP)