

When Academia Meets Industry: Concordia University Hosts the 3rd Edition of IEEE Research Boost.



In a dynamic welcoming evening on November 2nd, 2017, IEEE Montreal Section, IEEE Montreal Industry Relations Committee (IRC) and the Montreal Chapters of IEEE ComSoc, CAS, and TEMS collaborated generously with Concordia University: The school of graduate studies, MITACS, and NEXT AI to give birth to the 3rd Edition of the promising periodic event IEEE Research Boost. This event was the 3rd one in a year, and the 2nd taking place in Concordia University and organized by IEEE Montreal IRC chapter. With the theme "Give your research an industrial edge", more than 90 attendants checked into the event rooms while the organizers were taking care of welcoming attendees, facilitating the registration into the event's rooms, and inviting for food and soft drinks. The attendance was from both Academia and Industry, there was about 75 % with academic affiliations and 25 % working for industry. Moreover, 25 % of the participants were non-IEEE members. During the evening, some of them indicated that they see the value of IEEE and plan to join. The registration committee is composed of familiar faces of the active enthusiastic IEEE volunteers from all engineering disciplines. The registration started at 5:00 pm

sharply and took place smoothly and fast. The agenda of the event included two keynote sessions and two poster sessions with refreshments and networking took place in between.



Welcoming Speeches

After the first poster session, Prof. Anader Benyamin-Seeyar, the chair of IEEE Montreal Communications Chapter at IEEE Montreal Section, fired the starting gun to open the event by welcoming the attendees, the keynote speakers, and the organizers of the event. He highlighted his happiness that the 3rd edition of the IEEE Research Boost has been occurring in one year since the beginning. Prof. Benyamin-Seeyar invited Prof. Wei-Ping Zhu, the graduate program director of Electrical and Computer Engineering at Concordia University, to give his welcoming speech where he proudly welcomed the attendants and expressed his pleasure having the event twice in Concordia University. Mr. Raphael Tana, the business development manager at FONEX data systems Inc. and the VC of IEEE Montreal Industrial Relations Committee (IRC), closed the welcoming speech session by appreciating and giving the credit to the organizers of the event. Mr. Tana then invited the first keynote speaker to give his talk.



Keynote Sessions

The keynote sessions started at 6:10 pm with an impressive presentation held by Mr. Mohamed Musbah, Head of Product at Maluuba (a Microsoft Company). Maluuba is a Canadian AI company that is recently acquired by Microsoft. They are teaching machines to think, reason and communicate with humans.

Dr. Maria Toeroe, Expert of Software Architectures and Technologies at Ericsson Canada, unveiled the magic behind enabling 5G in her talk laying out how long term collaboration with Concordia University professors and graduate students turns the magic into technologies to support the technical advances towards 5G. Dr. Toeroe announced that the successful collaboration with Concordia in the past urges for more collaboration and extension of the project to 5 years more.

The smart living with Internet of Things was the title of the next speech by Dr. Ghourchian, Senior Data Scientist at Aerial Technologies Inc. Dr. Negar surprised the attendants with the inventions taking place in her lab where the footprints of the distortion of WiFi signals can be used to identify objects and even persons.

Ms. Lexi Kaplin, Chief Product Officer, emojiHEALTH, and Ambassador of NEXT Canada then gave her two-parts speech to introduce the Chatbots as a commercial channel to AI and the application in Healthcare and keeping track of medication doses. The second part of her talk was the introduction and promotion of the activities of Next Canada to help entrepreneurs overcoming the common obstacle towards successful startups.

The next keynote speech then took place after the second poster session, Dr. Sachitha Kusaladharma, Horizon Post-doctoral Fellow, Concordia University, introduced the current advances in cognitive radio networks and the challenges in the way to commercialization and regulations of cognitive radio based services.

Dr. Guillermo Mendoza-Suarez, Advisor, Research, Development and Partnerships at Concordia University then laid out the benefits of Academia-Industry partnership and clearly identified the different points of view for each party. Lack of communication, different expectations, and time limitations are amongst reasons of limited collaboration between Academia and Industry.

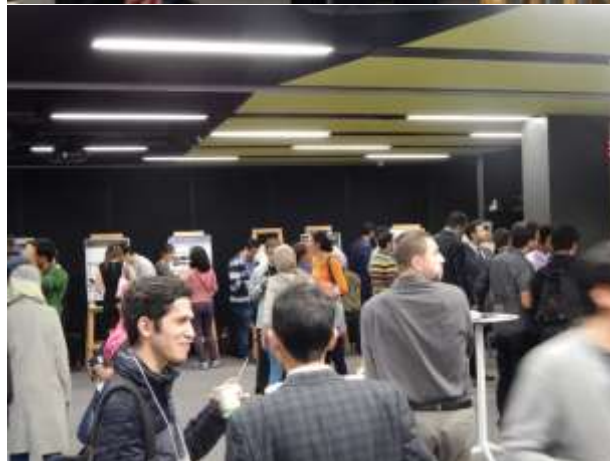
Finally, Dr. Amanda Rossi, Business Development Specialist for MITACS at Concordia University closed the keynote speeches with her presentation explaining the different funding programs that MITACS provides to graduate students.





Poster Sessions

Two poster sessions were held in the event where 19 poster presenters from 4 universities (Concordia, ETS, UoT and Polytechnique Montreal) arranged their posters in place and welcomed the attendants walking around and discussing their findings with them and the evaluators. The presented posters covered a wide spectrum of research fields which includes Communication Theory, Network Theory, Microwave and mmWaves, Renewable Energy, Robotics, Image Processing, Neural Networks and Natural Language Processing. The atmosphere of the poster sessions was so welcoming where technical discussions were taking place between all the attendants and the presenters while enjoying the refreshments and soft drinks. According to the organization committee plan, the evaluation of the posters took place during the poster sessions. The list of winning posters is then prepared to include the presenters in the awards ceremony.



Award Ceremony and Closing Remarks

Mr. Tana finalized the event by declaring the winning posters inviting them to the stage to receive their awards and for taking memorial photos. The winners were:

First Place Award (\$300): Hessam Amini (PhD Student, Concordia University). **Second Place Award (\$200):** Dr. Sourav Kumar Mukhopadhyay (PDF, Concordia University). **Third Place Award**

(\$100): Dr. Edena Rakotomanana (PDF, École de Technologie Supérieure), Jawad Dahmani (PhD Student, École de Technologie Supérieure), Elham Karimi (Master Student, École de Technologie Supérieure) and Vivek Shankar Varadharajan (PhD Student, Polytechnique Montreal).

