

# TRENT UNIVERSITY

## 1st. Annual Electric City Hackathon

November 5-7, 2016.



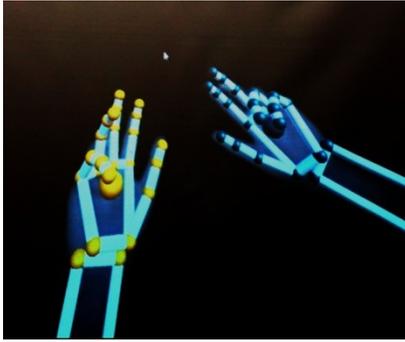
On November 4-6th, 350 of the most out-of-the-box student thinkers from across Canada descended on Peterborough for Trent University's first ever Hackathon. Research in Motion and the Greater Peterborough Innovation Cluster were the major sponsors for the event, among others. IEEE Peterborough was also a sponsor.

Electric City Hacks, partnered with Major League Hacking, is a 36 hour event taking place November 4th to 6th in Gzowski College (First Peoples House of Learning) in Trent University's Symons campus. This Hackathon challenged student innovators to design, build, and demonstrate their developments....

<http://www.innovationcluster.ca/2016/10/innovation-cluster-sponsors-first-ever-hackathon-trent-university/>

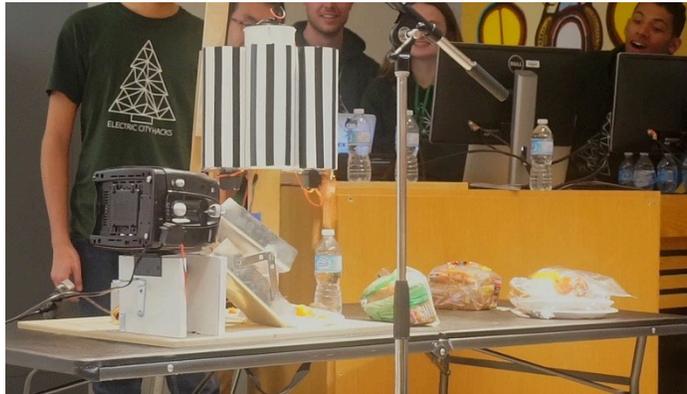
Through the good offices of Sabine McConnell, Chair of the Annual Peterborough Regional Science Fair which is held at Trent University each Spring, IEEE Peterborough Section established contact with the Trent Computer Science Department in Spring 2016. Helder Pinheiro met during the Summer with Matthew Barnes and Dexter Fichuk of the Trent Computer Science department to explore how a mutually beneficial relationship could be developed. There the matter languished until late September when they approached us to support the First annual Trent 'Electric City Hackathon'. Sean Dunne, Helder and Luc Matteau met with Matthew, Dexter and Yashar Morabbi Heravi. We arranged to provide financial support for two prizes the "Most Innovative Project" and the "Best Hardware Hack".





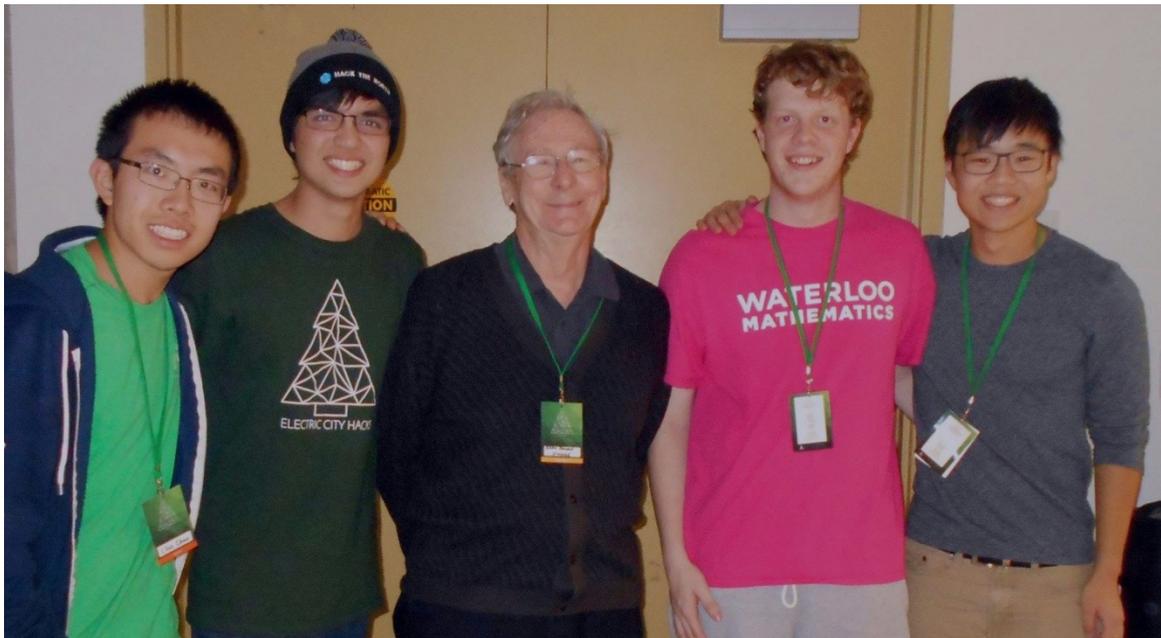
"Speech to text for sign language" was the goal of the project which won the prize for the most innovative design. They used two cameras to model the fingers of the speaker as a structure of vectors and then tried to equate the vector configurations to stored sign language patterns. In their presentation the team admitted to being totally dismayed when they realised the complexity of the task they had undertaken but they analysed it and developed a minimum functional subset of the system to demonstrate the feasibility of their proposal. They succeeded in doing so brilliantly.

The winners of the "Best Hardware Hack" award developed an automatic sandwich maker which involved a tilting toaster, a revolving filling dispenser turret and slice control gates, all servo operated. While its operation lacked precision it was very ingenious and a real crowd pleaser in operation. The judging for both awards was done by Sean Dunne and Helder Pinheiro, IEEE Peterborough Section.



Photos by Sean Dunne

Sean Dunne with the team which won the "Best Hardware Hack" award.



- Photo by Steve Guthrie

Sean Dunne, P. Eng., SMIEEE.