

Department of Electrical and Computer Engineering Faculty of Engineering, Architectural Science

2015 Capstone Design Project Excellence Awards

Dear all,

It is my great pleasure to announce the winners of 2015 Marzio Pozzuoli Capstone Design Project Excellence Award and Department of Electrical and Computer Engineering Capstone Design Project Excellence Awards.

The Department of Electrical and Computer Engineering Capstone Design Project Excellence Awards (10 awards, \$1,000 each) were established by the Department of Electrical and Computer Engineering to formally recognize the exceptional performance of students in capstone design projects.

In 2014, Marzio Pozzuoli Capstone Design Project Excellence Award (1 award, \$10,000) was established by the Faculty of Engineering and Architectural Science with the generous donation of Mr. Marzio Pozzuoli, an alumnus of the Department of Electrical and Computer Engineering (electrical engineering, 1987), an Entrepreneur-in-Residence in the Faculty of Engineering and Architectural Science, the founder and former president and chief executive officer of RuggedCom Inc., to recognize the truly exceptional performance of one capstone design project in the Department of Electrical and Computer Engineering.

2015 capstone design project excellent award winners were selected on the basis of their performance in ELE/COE/BME800 (*Design Projects*) over the entire 2015 winter term. All weekly progress reports, milestone reports, oral examination and demonstration, and final project reports all capstone design projects of all design projects were carefully examined by the capstone design project supervisors and a number of exceptional projects were short-listed. The materials (weekly progress reports, milestone reports, oral examination and demonstration, and final project reports) of the short-listed projects were then evaluated by the Judging Committee consisting of Drs. X. Fernando, V. Geurkov, M. Jaseemuddin L. Kirischian, M. Kyan, K. Raahemifar, K. Umapathy, B. Venkatesh, A. Yazdani, F. Yuan, and M. Zeytinoglu. They were then further evaluated by the members of the Judging Committee in the Open House individually. The score of the members of the Judging Committee were then compiled and averaged (Judges were not allowed to evaluate their own projects). The project that received the highest score was selected to receive_Marzio Pozzuoli Capstone Design Project Excellence Award and top 2-11 projects were selected to receive the Department of Electrical and Computer Engineering Capstone Design Project Excellence Awards.

Now it is my great pleasure to announce the winners of 2015 capstone design project excellent award:

Marzio Pozzuoli Capstone Design Project Excellence Award

1. Visual Odometry Control System (Arash Aminianrazavi, Andre Husain, Sami Dalati)

Department Capstone Design Project Excellence Awards (random order)

- 1. Biomechanical Profiling Platform for Pointe Shoe Fitting (Brahmdeep Saini, Jinthujah Selvarathinam, Ivan Martyushev)
- 2. Sworm Robotics: An Approach and Architecture to Autonomous Robots Mapping Unknown Environments (Negar Taherian, Hasnainali Walli, Nouran El Molla)
- 3. *Position-Free Wireless Power Transmission* (Mark Sumagang, Deliph Vijeyendrakumar, Lavanya Namuduri)
- Reconfigurable Robotic System (R2S) (Anna Leshchenko, Rishabh Kumar, Edward Nidoy)
- 5. An Electro-oculogram Based Screening Device for Evaluating Alertness (David Nguyen, Alan Quach, Borys Ostapienko)
- 6. Smart Solar Panel with Battery Management (Sumit Arora, Shalin Inamdar, Sebastian Suen)
- 7. Programmable AC Power Source using Class D Amplifier (Zhifang Cao, Mingming Zhu, Reynold Salazar)
- 8. Smart Socket (Hassan Ahmed, Usman Bhutta, Akber Khan)
- 9. Self-Navigating Robot for Search and Rescue Operation (Sushrut Bhalla, Nihal Motha, Mohammad Shafique)
- 10. Smart Building (Sother Edouard, Biniam Admikew, Sharon Noronha)

The winning team of Marzio Pozzuoli Capstone Design Project Excellence Award will receive certificates and a cheque of \$10,000 from Ryerson University. Each winning team of Department of Electrical and Computer Engineering Capstone Design Project Excellence Award will receive certificates and three tablet computers from the Department of Electrical and Computer Engineering.

On behalf of the Department of Electrical and Computer Engineering, I thank you and your capstone design project supervisors for your hard work and contributions to the continuous success of the Department and the University.

Congratulations to the winners of 2015 Marzio Pozzuoli Capstone Design Project Excellence Award and Department of Electrical and Computer Engineering Capstone Design Project Excellence Award!

Fei Yuan, PhD., PEng.

Professor and Chair

Department of Electrical and Computer Engineering

Ryerson University