

# Theodor M. Perivolaris

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## Relevant Experience

### Engineering Capstone Design Project

(Oct. 2013 - Apr. 2014)

#### Project Manager

- Developed and tested an iOS application able to classify skin conditions based on photos, using supervised machine learning (neural networks) and an Apache server
- Improved the neural network to obtain a confidence of 95%, an increase from 67%, by using parallel computing to find the optimal number of hidden nodes
- Regularly attended meetings with supervising professor, and created weekly progress reports.

### Other Selected Projects

- Designed, fabricated and tested a 3 lead monitoring electrocardiogram (ECG)
- Created algorithm in MATLAB to detect possible seizures in EEG signals
- Conducted field study and analysis on the use of rapid serial visual presentation to increase the rate of reading

### Key Courses

- Design of BioMEMS, Biomedical Image Analysis, Biomedical Instrumentation, Human-Computer Interfaces, Rehabilitation Engineering, Radiation Therapy Devices

## Work Experience

### Ryerson Engineering Student Society

(Jan. 2012 - Oct. 2012)

#### Orientation Week Chair

- Organized and supervised a week of events for over 1,000 new Engineering students.
- Secured and managed the \$18,000+ budget, a 55% increase compared to the previous year, by presenting the need for an increase to the Dean of Engineering.
- Managed a team of 3 Vice-Chairs, multiple other organizing volunteers, and a team of more than 90 student leaders.
- Prepared feasibility and risk management analysis for each event
- Laid groundwork for quality management system

### Ryerson Student Center: Oakham House

(Sept. 2011 - Present)

#### Line Cook

- Gained excellent practical experience with time management, working in teams, working under pressure, and conflict resolution.

## Volunteer Experience

### FIRST Robotics Competition - Team 907

(Sept. 2010 - Dec. 2012)

#### Mentor

- Advised Team 907 through strategy synthesis and design process.
- Developed and maintained relationships with student team members and mentors.

### Toronto East General Hospital

(Sept. 2007 - Nov. 2008)

#### Student Volunteer

- Assisted nurses, patients and doctors with any tasks as requested in a quick and courteous manner.

## Education

### B.Eng

#### Ryerson University

Biomedical  
Engineering

April 2014

## Expertise

### Computer Skills

- MATLAB
  - Neural Networks
  - Parallel Computing
  - Image Processing
  - Signal Processing
  - Simulink
- CoventorWare
- Python
- Xcode
- Microsoft Powerpoint, Word & Excel
- Apple iWork Suite