

## EDUCATION

### Masters of Engineering in Industrial and Mechanical Engineering, 2018 | University of Toronto

Product Design	MIE 540	Intelligent Robots for Society	MIE 1070
Data Science ( Python )	MIE 1624	Human Factors Engineering	MIE 1401
Advanced Mobile User Interfaces ( Node.js )	ECE 1782		

### Bachelor of Applied Science in Honours Computer Engineering, 2015 | University of Waterloo With Management Sciences Option

User Centred Design Methods	SYDE 348	Embedded Software ( C )	ECE 455
Engineering Design Project ( Arduino )	ECE 498A/B	Computer Security ( C , Ruby on Rails )	ECE 458
Database Systems ( Java , SQL )	ECE 356		

## GRAD WORK

### AcneBot | <https://p-k.github.io/acneBot.html>

Advanced Mobile UI principles used to design a Facebook chat bot that helps a user determine if they have acne vulgaris.

### Lexmark Software Redesign | <https://p-k.github.io/lexmark.html>

Identified and addressed Human Factors issues within the UI of the application.

### Twitter Sentiment Analysis

Used data science principles to conclude the sentiment of Canada related tweets using scikit-learn (machine learning library).

## SKILLS

Java	3D Modelling + Printing	Arduino + Rapid Prototyping	User-Centred Design	HTML, CSS
C#	Ruby on Rails	JavaScript, AngularJS	SQL	Python

## WORK EXPERIENCE

### Latency Hammer Architect (Prototype Engineer)—Co-op | Tactual Labs

Sept—Dec, 2014

- Devised Arduino driven tool ("Hammer") to measure latency between user input on touch screens and onscreen feedback.
- Designed & 3D printed a custom enclosure to improve portability and protect touch input + controller boards.

### Software Engineer—Co-op | EventMobi

Jan—May, 2013

- Localised product for several languages in order to increase accessibility.
- Created specifications, designed, & developed (architecture, RESTful API) internal tool for Account Managers to increase efficiency in fetching client info.
- PHP, MySQL, AngularJS, and HTML.

### Software Engineer—Co-op | Mosaic Sales Solutions

May—Aug, 2012

- Developed configurable 'RSVP' & 'Sweepstake' Facebook application templates for company to easily reuse for different marketing campaigns.
- Ruby on Rails, jQuery, and PostgreSQL.

### Software Engineer—Co-op | Mosaic Sales Solutions

Sept—Dec, 2011

- Built + maintained Facebook and Twitter campaign apps for Nutella and Stella Artois based on client specs.
- Architected internal web application geared to prepping future co-op students.
- Ruby on Rails, PostgreSQL, Git.

## SELECTED PROJECTS

### Tag'd | <https://p-k.github.io/tagd.html>

Portable laser tag system: a capacitively triggered laser-firing glove, fibre-optic lined vest, and an Arduino-driven hub, which manages gameplay settings, score keeps and displays stats in real-time on a web page.

### RiseN'Shine | <https://p-k.github.io/riseShine.html>

Travel friendly sunrise simulating alarm using flexible LED strips, piezo-electric sensors and an Arduino.

### Waterloo Works

Usability assessment of client WaterlooWorks using user-centred design methods (usability testing, heuristic evaluation, use of personas, survey design and data collection) in order to suggest improvements to product.