

SKILLS

Data Modelling Server-Side JavaScript TypeScript MongoDB OOP Spec Planning Agile

WORK EXPERIENCE

Software Developer | Zensurance

Toronto, ON | Aug, 2018—Dec, 2019

- Designed architecture and development plans to automate bordereau reporting that would require no human intervention.
- Developed a notification API in TypeScript to send notifications to account managers upon changes in payment pipeline.
- Developed models and built workflows using JavaScript and MongoDB to develop specialized insurance questionnaires for different industries, increasing avenues for revenue by 20%.
- Conducted primary research and performed data modelling to create custom Salesforce component for all brokers to use.
- Developed a library to perform automated invoice generation and improved data reconciliation between 3rd-party services.
- Converted key libraries from JavaScript to Typescript for better standardization.

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

Toronto, ON | 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

Toronto, ON | Jan—May, 2013

- Localised product for several spoken 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

Toronto, ON | 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

Toronto, ON | 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.

EDUCATION

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

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|---|----------|--------------------------------|----------|
| 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

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| 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).

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.