

# Daniel Robertson

University of Waterloo | Computer Engineering | [dj2rober@edu.uwaterloo.ca](mailto:dj2rober@edu.uwaterloo.ca) | (519) 377-5953 | [danrobertson.ca](http://danrobertson.ca)

## WORK EXPERIENCE

### Software Developer, Sortable, Kitchener, ON

January 2018 – April 2018

- Designed a script to analyze rules, for use with header-bidding library **Prebid**, leading to quantitative recommendations for simplification
- Utilized **Apache Spark** and **Scala** to process and interpret large datasets
- Consulted directly with a potential bidder client to facilitate and troubleshoot integration with Sortable
- Spearheaded data reconciliation by integrating various 3<sup>rd</sup> party APIs

### Catastrophe Modeling Application Developer, Validus Research Inc., Waterloo, ON

September 2016 – December 2016

- Learned **Python**, **SQL**, and how to utilize a **REST** API, with **Flask**, on the fly
- Implemented a backend feature in **Python** pulling industry and client data from multiple **SQL** tables, then utilized **Pandas** and **openpyxl** to process and export to an Excel Spreadsheet
- Summarized client and industry data using **AngularJS** for Validus' proprietary modeling application, cutting analysis time for modelers approximately in half
- Consulted and collaborated with team members, marketing, and support to develop an intuitive and user-friendly design for all features and fixes

### QA Analyst and Software Developer, Microdea Inc., Markham, ON

January 2016 – April 2016

- Designed and developed the document annotation feature for the flagship web application using **AngularJS** & **Typescript**, achieving the company's first major milestone for the web app
- Implemented an adapter to maintain cross-compatibility between new **JSON** data models and legacy XML data models using **C#**
- Self-taught testing methodologies and best practices to create over 500 unit tests with **NUnit**, **QUnit**, **dotCover**, and **Istanbul**

### Infrastructure Support Technician, Shared Services Canada, Toronto, ON

May 2015 – August 2015

- Performed a DNS clean up and enabled scavenging for automated clean up
- Prepared new terminal servers for deployment within the company

## PROJECTS

### Advanced Lower-Limb Orthotics, URA – University of Waterloo

- Researching and prototyping solutions for Drop Foot through the use of semi-active ankle foot orthotics, and modelling in **OpenSim**

### Concussion Detection System, Fourth Year Design Project – University of Waterloo

- Researching methods of concussion detection, prevention, and baselining through the use of sensor networks, and data analysis

## INTERESTS

- Loves languages and seeing the world; went on Exchange to Denmark from January – June 2017 and visited 9 countries
- Blocks cross and hits middle with 10+ years of volleyball experience
- Played lead and supporting roles in multiple theatre productions
- Growing interest in the biomedical field, genetics, machine learning, and AI

## SKILLS

### Languages

HTML/CSS • LESS • JavaScript  
TypeScript • Python • SQL • PSQL  
C • C# • C++ • Assembly • Matlab  
Java • Clojure • Scala

### Frameworks

AngularJS • Angular 2.0 • Flask  
NUnit • QUnit • Apache Spark

### Libraries

FabricJS • jQuery • Bootstrap  
Pandas • openpyxl • Prebid

### Environments

Windows • OSX • Ubuntu

## LEADERSHIP

### GradComm Directorship

Waterloo Graduation Committee  
May 2018 – Present

### VP Communications

Waterloo Engineering Society  
August 2016 – December 2017

### Orientation Week Leader

University of Waterloo  
Fall 2015, 2016, 2017

### Engineering Ambassador

University of Waterloo  
September – December 2015

### Former Lifeguard and Instructor

YMCA Owen Sound  
August 2013 – August 2014

## AWARDS

### UW International Experience Award

University of Waterloo, 2017

### UW Global Experience Award

University of Waterloo, 2017

### Schulich Leader Nominee

The Schulich Foundation, 2015

### The Owen Sound Brick Brothers Award

Owen Sound, 2015

### Presidents Scholarship

University of Waterloo, 2015