

## WORK EXPERIENCE

### *Software Consultant* - BDO Solutions

- Brought a large scale two year long project to completion for Dairy Farmers of Ontario by developing features in C# and SQL-Server for a multi-tenant application that manages statewide milk distribution.
- Merged over 200,000 data entries from a client database to a local one using 'SQL Server Integration Services' and SOAP. Developed the pipeline flow by mapping source and destination columns.
- Managed the initial development for a newly secured contract with Dairy Farmers of Nova Scotia, refactoring the above application according to customer requirements.

### *Software Engineer* - DBRS Limited

- Implemented full-stack features on an internal web app using C#, Angular and Entity Framework, thereby reducing time duration of financial analyst meetings by over 50%.
- Wrote Excel plug-in(s) in C# that is used by over 200 analysts allowing them to import, process and export financial data as well as submit changes directly to the production database, saving ~1100 hrs/month in company time.
- Migrated databases with over 150,000 entries from Oracle to SQL Server using C# and Powershell scripts.

### *Web Developer* - Knowroaming Inc

- Developed a browser testing GUI with JavaFX and Selenium to create automated test suites, increasing UAT (User Acceptance Testing) coverage for the main website by about 80%.
- Led the development of the customer facing mobile website using PHP, jQuery and Java.

### *Infrastructure Security Analyst* - Maple Leaf Foods

- Identified viruses inside the company network, got introduced to security, networking and protocols.
- Analysed internal computer security trends and statistics using IronPort, to catch a worm that multiplies itself and sends over 35,000+ malicious emails over the weekend.

## RECENT PROJECTS

### Sugar Nanny

- Created a web app at UofTHacks that tracks sugar levels and provides insulin recommendations based on food intake. Wrote the front end in Angular.js and added backend features with Python & Flask.
- Placed in **Top 10 hacks** and won '**Best Life Saving App**' and '**Best use of AWS**'. Featured On: [Veeva](#)

### Pebilepsy

- Developed a nocturnal epilepsy tracker and prevention application. Wrote the Android platform to store and upload data to the web, recording and visualizing the seizure-like incidents.
- Won '**Best Pebble App**' at Hack the North. Featured On: [Hacker News](#), [DevPost](#), [Med Gadgets](#)

### Potentiometer

- Calibrated an infrared sensor output using Arduino, C and Python to fit a curve to predict the distance from an object with 0.15 cm accuracy

### Music Notes

- Used frequency analysis to transcribe classical piano pieces into sheet music using MATLAB. Resynthesised the notes clip and used statistics to determine the accuracy of resynthesis.

### MP3 Player

- Programmed an MP3 player software in C with functionality such as skipping to the next/previous songs and playing the song at an altered speed rate.

### CalFit

- Chrome notifications that get triggered based on the most optimal time for a customer service oriented employee to take a break. Created the entire backend service layer in NodeJS and MongoDB and integrated Chrome plugin. Hosted on Microsoft Azure and created the [promotional video](#).

## SKILLS

### Languages:

Java, C#, C++, C, JavaScript, Python, MATLAB

### Front End:

Angular.js, jQuery, Bootstrap

### Back End:

.NET, Node.js, Express, PHP

### Testing:

Selenium, Chai, Mocha

### Database:

MySQL, MongoDB, SQL Server

### Other:

Powershell, Azure, Google Cloud Messenger, Socket.io, RabbitMQ, Redis

## LEADERSHIP

### Machine Learning Presenter

Informed large professional audience (40+) on neural networks, deep machine learning and advanced machine learning.

### PCB Design Director

Introduced PCB Design best practices, introductory level common mistakes and demoed EAGLE software in front of 150+ students.

### Networking Director

Led the organization and marketing of a student-alumni networking event.

## EDUCATION

### University of Waterloo

3A Mechatronics Engineering  
Graduating May, 2018