

# Computer Engineering Student

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#### TECHNICAL STRENGTHS

Languages: Java, C/C++, C#, Python, JavaScript, PHP, SQL, HTML/CSS, RISC-V, VHDL

Frameworks / Libraries: Spring, Node.js, Angular.js, .Net Core, MongoDB, MySQL, PyTorch, TensorFlow

Tools: Docker, Heroku, TeamCity, Git, Perforce, PostMan

## WORK EXPERIENCE

AlertDriving May 2019 - August 2019

#### Software Engineering Intern - Backend Development

- Created a backend API used to generate and send 10,000+ emails per day, improving delivery times by 23%
- Enhanced security by integrating **Keycloak** as an authentication service, reducing fraudulent logins by **11%**
- Designed and deployed **micro-services** that manage user creation via batch files, autonomously powering profile set up, licence allocation and billing procedures; effectively reducing the need for manual initialization.
- Improved scalability by redirecting client traffic using a CDN, saving \$700 in annual server costs.

OpenText September 2018 - December 2018

### Software Engineering Intern - Tools Development

- Analyzed queries to reduce bottlenecks by restructuring and improving database design, lowering run times by 7%
- Eliminated 93% of server allocation conflicts by creating a web based booking system, used by 800+ employees
- Designed and owned a project tracking tool used by companywide managers to monitor cross-team projects
- Engineered a complete end to end framework for automated unit testing

## **Ontario Medical Association**

January 2018 - April 2018

#### Software Engineering Intern - Full Stack Development

- Overhauled the backend architecture to improve response times by converting outdated SOAP APIs to REST APIs
- Designed and developed a data migration program, allowing clients to claim records containing their PII data
- Implemented changes to the search bar, leading to 15% more accurate results being displayed

## **PROJECTS**

#### Watonomous - Design team building an autonomous vehicle to compete in the SAE competition

- Collaborated in a team to research and design an object detection framework using a convolutional neural network
- Experimented with various optimizers and implementations to achieve an accuracy of 56 mAP at 40 fps

#### **Jarvis** - An intelligent desktop assistant controlled via voice commands

- Created an assistant using open source libraries that can send emails, update calendars and perform web searches
- Integrated a neural network to train the virtual assistant to improve its responses based on user input

#### Binge.Tv - A web based application that allows users to stream movies and tv shows

- Utilized the MEAN stack to create a fully functional website which lets users login and browse content
- Researched into PayPal's API along with other technologies to create a secure checkout for users

## **EDUCATION**

# **University of Waterloo**

September 2017 - Present

- Candidate for BASc in Honours Computer Engineering
- Relevant Course Work: Data Structures & Algorithms Object Oriented Principles Embedded Microprocessor Systems Digital Computers Introduction to Machine Learning