



## CORE COMPETENCIES

- \* **Languages and Frameworks:** Python, JavaScript, Angular, React, Redux, Java, C/C++, C#, .NET, SQL, Flask, Selenium
- \* **Tools and Technologies:** AWS, Docker, Git, Bash, Elasticsearch, Ansible, Jenkins
- \* **Concepts:** Web Development, Machine Learning, Cloud Computing, REST APIs, Relational Databases, OOP

## WORK EXPERIENCES

### SS&C – Full-Stack Developer

Sep 2020 – Dec 2020

- \* Optimized search functions and queries in PostgreSQL by adding indexes and creating stored procedures, resulting in a 20% speedup
- \* Developed front-end components in Angular and refactored the codebase to allow for user theming
- \* Integrated the Vault infrastructure into a Java Spring Application to protect secrets used for configuration

### IBM – IoT & AI Developer

Jan 2020 – Apr 2020

- \* Designed a REST API using Python and Flask that dynamically adds, trains, and recognizes users for facial recognition
- \* Reduced training time for a new user from 1 hour to 5 minutes by creating an intermediate feature cache in HDF5
- \* Implemented REST API on Paperspace in a GPU-accelerated Nvidia Docker container, halving training time
- \* Developed a web-based image annotator using React, Redux and Leaflet.js to simplify object classification for business users and allow cross-platform collaboration on the same dataset of images

### Genesys – Full-Stack Developer Intern

May 2019 – Aug 2019

- \* Created an AWS RDS microservice with serverless lambda functions and CloudFormation to simplify the architecture
- \* Composed several Ansible scripts, Jenkinsfiles, and Dockerfiles to automate deployment, reducing manual workload
- \* Configured and queried Elasticsearch in ECS and EC2 instances in accordance to FedRAMP standards for US approval

### Nielsen – Software Developer

Sep 2018 – Dec 2018

- \* Developed a utility in C# that cleans data using metadata in Oracle, improving efficiency from a day to 10 minutes
- \* Used C# and Selenium to scrape flyers from major retailers to reduce manual workload from half a day to 5 minutes
- \* Filtered and cleaned large datasets stored in SQL Server and Oracle, returning a compact CSV within 5 minutes

### Morneau Shepell – System Developer

Jan 2018 – Apr 2018

- \* Created an integration application that syncs defect data from HP ALM to Microsoft VSTS using C#, .NET Core 2.0, REST APIs and a 3-way merging algorithm to allow for smoother agile scrum meetings
- \* Designed UI POCs using Bootstrap, Angular 5, and ASP.NET Core that successfully illustrated a new syncing interface

## PROJECTS & ACTIVITIES

### Handwriting Autocorrect

Feb 2020

- \* Developed a Python application that parses handwriting using optical character recognition (OCR) and suggests appropriate spellings using natural language processing (NLP)
- \* Implemented the messaging queue using Solace between the Raspberry Pi and the server

### Chat Server

Oct 2018

- \* Created a chatroom application in Python where users can broadcast messages over the same network
- \* Gained insight on key networking concepts such as TCP/IP, protocols, sockets, client-server model, and addressing

## EDUCATION

### University of Waterloo

2017 – 2022 (expected)

Candidate for Bachelors of Applied Science (Computer Engineering)