



CORE COMPETENCIES

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

PROFESSIONAL EXPERIENCE

IoT & AI Developer

Jan 2020 – Apr 2020

IBM

- * 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 and Redux, simplifying object classification for business users

Undergraduate Research Assistantship

Sep 2019 – Dec 2019

University of Waterloo

- * Using C++ and OpenGL, programmed a convolutional neural network into an FPGA to hardware accelerate the model

Full-stack Developer Intern

May 2019 – Aug 2019

Genesys

- * 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

Software Developer

Sep 2018 – Dec 2018

Nielsen

- * 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

System Developer

Jan 2018 – Apr 2018

Morneau Shepell

- * 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 AND ACTIVITIES

Waterloop – Front-end Web Developer

May 2020 – present

- * Refining the codebase for Waterloop's website to improve web development skills in React, Redux, and TypeScript

Handwriting Autocorrect – MakeUofT Hackathon

Feb 2020

- * Developed an application in Python that parses handwriting using OCR and suggests appropriate spellings using NLP
- * Implemented the messaging queue using Solace between the Raspberry Pi and the server for future scalability

EDUCATION

University of Waterloo

2017 – 2022 (expected)

Candidate of Bachelors of Applied Science (Computer Engineering)

- * **Related Courses:** Algorithms and Data Structures, Systems Programming and Concurrency