Samuel Campbell
Software Engineer -- New Graduate
514-654-1320
Samuel.pcampbell@gmail.com
https://samuel-campbell.github.io/

Education

Concordia University, Software Engineer (June 2015 – August 2018) -- 3.71 GPA

Professional Experience

MDA (Mai 2017 – December 2017) – Manufacturing Software Engineer

- Implemented scrum methodology, unit testing, & source control in the department.
- Designed web application to optimize time and resources in department (cost ~ 10, 000$ / hour)
- Completed the company's 1st automated chain line in the department (saves ~ 100, 000$ / day)
- Image processing & pattern recognition to automate satellite defects analysis.
- OneWeb; constellation of 648 space satellites to provide the planet with Internet.

Technologies: C, C#, Git, Microsoft SQL Server, OpenCV, Python, & Telerik MVC

ADS (May 2016 – April 2017) – Research & Development Software Engineer

- Legacy code refactoring via better implementation of data structures and algorithms.
- Performed code review & unit testing in an agile environment.
- Completed software, used in integration testing, to emulate ~90% of all road vehicles.
- Implemented Jenkins hosted locally with Tomcat for CI/CD (saves ~ 10 min per build).
- Coded/Created microcontroller for dynamic CAN/I2C/SPI emulation + drivers used in CI/CD.

Technologies: C, C#, FPGA, Jenkins, MySQL, Python, SVN, Tomcat, & VHDL

Projects

Dota 2 Outcome Predictions (June 2018 – July 2018)

- Achieved 2% higher prediction accuracy than similar research which used 25x more data points.
- Created custom data set + data wrangling via web scraping, entity matching & entity resolution.

Technologies: Git, Jupyter, Pandas, Python, Matplotlib, & Scikit-Learn

ProceZeus (September 2017 – April 2018)

- World's first open source AI powered chatbot for rental board law with over 87% accuracy.
- Awarded 35, 000$ in scholarship upon satisfactory completion and stakeholder's content.
- Microservices hosted in custom Docker containers → Worked on Machine Learning service

Technologies: Azure, Bash, Docker, Flask, NLTK, Spacy, Scikit-Learn, Tensorflow, Travis, & Vue.js

MCGA (January 2017 – May 2017)

- A* algorithm used to generate indoor/outdoor navigation for Concordia campus.
- Image processing (open/close morphology) to generate walkable path for indoor maps.

Technologies: Android Studio, Java, Git, Travis

Proficient Languages: C# • C++ • Java • Python
Libraries: Scikit Learn • Tensorflow • NLTK • Spacy • Rasa • Pandas • OpenCV • Matplotlib
Others: MongoDB • MySQL • PostgreSQL • Docker • Travis • AWS • Azure • Apache • Linux