

EDUCATION

University of Waterloo

Software Engineering
Sept 2016 - Apr 2021 (Expected)
Candidate for Bachelor of
Software Engineering (B.SE)

SKILLS

LANGUAGES:

- Highly proficient in **Python**, **C/C++**, **Javascript**, and **SQL**
- Adept in **Ruby**, **Java**, **Bash (Unix)**, and **HTML/CSS**

FRAMEWORKS AND TOOLS:

- Practical experience with **Django**, **Flask**, **Node.js** and **Ruby on Rails**
- Deployed servers to **AWS** using **Kubernetes**, **Chef**, **Docker**, and **Nginx**
- Utilized persistent data stores such as **Redis**, **MongoDB**, **PostgreSQL**, and **ElasticSearch**
- Skilled with **Kafka**, **Zookeeper**, and **RabbitMQ**

EMPLOYMENT

WIZELINE

Software Intern on PPM Roadmap Team

Apr 2017 to Aug 2017

- Implemented concurrent backend **Flask** API for features (such as Object Linking and Undo/Redo) that were applied over 100 times a day and led to an 18% increase in user activity.
- Re-created local development environment to match production instances on **AWS**, using **Kubernetes**, **Docker**, and **Kafka+Zookeeper**. Reduced build time to 1/6 of the original local environment.
- Automated the congregation of usage statistics for Roadmap via data mining techniques applied to **PostgreSQL** databases. Aggregated over 2 million event records via **ElasticSearch**, **Intercom**, and **DataDog**.

PROJECTS

BOTORNOT ⚙️ **Javascript, Node.js, Express, Socket.io**

Aug 2017 to Current

- Online Turing Test game which puts multiple users in a chatroom with chat bots. The users have to guess which players are human and which are not
- Developed RESTful API endpoints with Node.js/Express + Socket.io to enable real-time, bi-directional sending and receiving of messages
- Coordinated with several other developers to establish proper communication between frontend and server endpoints

DIRECTIONS TO GO ⚙️ **Python, Flask, Nginx, uWSGI, AWS, Ubuntu**

Dec 2016 to Apr 2017

- Created a Flask-hosted SMS endpoint which allows users to text Google Directions search requests and receive walking/bussing instructions
- Configured Nginx reverse proxy and deployed uWSGI+Flask server on AWS ECR to support foreign requests

STROIT.LIFE ⚙️ **Python, Javascript, Node.js, CSS, Cloud Infrastructure**

Nov 2016 to Apr 2017

- Web application utilizing Google's Direction API in conjunction with over 1 million entries of local statistical crime data to find safe walking paths through Detroit
- Augmented Google's path-finding algorithm to greedily produce several routes which optimize the tradeoff between safety and walking distance
- Deployed a Node.js/Express server to Linode Cloud Hosting to support real-time user queries

AWARDS

WATERLOO ENGINEERING COMPETITION

Nov 2016

- 2nd Place in the team programming division.
- Constructed and implemented a weighted Stable Marriage Problem algorithm

University of Waterloo · CANADIAN COMPUTING COMPETITION

May 2016

- Top 5% of all 5000+ contestants in the Senior Division

Educational Computing of Ontario · ECOO TEAM PROGRAMMING COMPETITION

Mar 2016

- Analyzed and solved mathematical and algorithmic problems in teams 4
- District of Peel Regional Champions (for 2 consecutive years) and top 10 team at the ECOO Provincial Finals