





Essa Saeed

Honours Software Engineering
University of Waterloo · Class of 2020

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Skills

- Programming: JavaScript, C++, Python, Swift, Java, C, SQL, Objective-C, Assembly
- Web Development: Node.js, Express.js, TypeScript, Flask, HTML, CSS, jQuery, Bootstrap
- Tools: AWS, Docker, Tensorflow, Caffe, OpenCV, Cordova, Fiddler, Git, JIRA
- Interests: Distributed Systems, Concurrency, IoT, Real Time Services, Machine Learning

Experience

Index Exchange Inc. May. 2018 - Aug. 2018
Software Engineering Intern Kitchener, Ontario

- Upcoming work/co-op term democratizing digital advertising on the backend team

Mappedin Inc. Sep. 2017 - Dec. 2017
Software Developer Intern Kitchener, Ontario

Node.js | Python | Swift | Docker | Tensorflow | OpenCV | TypeScript | Webpack | AWS S3 | Git

- Built prototype **real time face recognition application** from scratch to run in dockerized container leveraging WebSockets, computer vision and convolutional neural networks
- Built prototype **real time position tracking and geofencing service** to notify users over WebSockets from scratch, with a data pipeline from RFID, routing and a user API library
- Developed **binary deserialization tool** for parsing map data using prototypal inheritance

SAP SE Jan. 2017 - Apr. 2017
Mobile Developer Intern Waterloo, Ontario

JavaScript | Node.js | Objective-C | Cordova/Ionic | Maven | SAPUI5 | SAP HANA | Gerrit

- Developed mobile plugin to import certificates **reducing authentication time by ~2.67s**
- **Maintained** mobile SDK and **shipped** fixes for OAuth 2, the InAppBrowser and AuthProxy
- Presented a **reverse proxy cache** solution to simplify bug reproduction for debugging

Projects

- Website: Made cafeonroute.ca for restaurant using **Google APIs, AWS EC2 and Route53**
- iOS App: Created and published "Quran Daily Selections" with **over 100 downloads**
- Android App: **Singleton** model quiz application using the **MVC** pattern and **XML** layouts
- Web App: Parsing **JSON** from APIs to make recommendations leveraging localStorage
- Course Project: **Compiler** for a subset of C that uses abstract syntax trees and grammars

Relevant Courses

- Algorithms, Operating Systems, Data Structures, Compilers, Design Patterns, Testing, Computer Hardware, Digital Circuits, Logic, Statistics, Discrete Math, Linear Algebra