# Essa Saeed

## Honours Software Engineering

University of Waterloo · Class of 2020

mesaeed@edu.uwaterloo.ca

aithub.com/EssaSaeed 0

linkedin.com/in/essaeed in

essasaeed.github.io ===



#### Experience

# Mappedin Inc.

Sep. 2017 - Dec. 2017

### Software Developer

- Prototyped real-time face recognition application using computer vision and neural networks [Python, TypeScript, Tensorflow, OpenCV, Node.js, AWS, Docker]
- Created internal tool to record test videos for face recognition validation
- Read academic articles to implement prototype height detection algorithm
- Built and demoed real-time position tracking and geofencing prototype service and developed visualizations [Server-Side Swift, Three.js, Websockets]
- Prototyped Augmented Reality labels into iOS indoor navigation app [ARKit]

#### SAP Canada Inc.

Jan. 2017 - Apr. 2017

#### Mobile Developer

- Developed hybrid mobile plugin for app certificate importing to reduce time taken for authentication [Node.js, Objective-C, Cordova]
- Maintained mobile SDK by fixing several bugs and greatly improving docs [JavaScript]
- Presented well received demo of flagship app performance test results [Highcharts.js]
- Researched use of a reverse proxy cache to simplify bug reproduction for debugging

#### Apptitude Apps

Jul. 2016 - Aug. 2016

#### Application Developer

- Made cafeonroute.ca for local restaurant [Bootstrap, AWS, Google APIs]
- Developed responsive front end for video web application [HTML, CSS, ¡Query]
- Created and published "Quran Daily Selections" on the Apple App Store [Objective-C]

#### **Projects**

- CMS: Content Management System for blog posts [Flask, SQLite, Heroku]
- Game: Card game designed in UML using MVC and OOP principles [C++, GTKmm]
- Web App: TV show recommendation service that leverages a RESTful API
- Course Project: Compiler for a subset of C that uses parse trees and grammars [C++]
- Simulation: Conway's game of life displayed on OLED for microcontroller [C]

#### Skills

- Programming: C++, JavaScript, Python, Swift, Java, C, Objective-C, Assembly
- Web Dev: Node.js, TypeScript, Flask, SQLite, HTML, CSS, jQuery, Bootstrap
- Tools: AWS, Docker, Tensorflow, OpenCV, Cordova, Heroku, Git, JIRA, Bitbucket