Ibrahim Irfan



EDUCATION

University of Waterloo - Bachelor's of Software Engineering

93% CGPA with 2 consecutive top decile and Dean's List awards.

2017 - 2022

SKILLS

Proficient: C++, C, Python, Node.js, .NET Core, AWS, HTML, CSS

Comfortable: PHP, MySQL, AngularJS, DynamoDB

Familiar: Docker, MongoDB, Go, OpenCV, TensorFlow

WORK EXPERIENCE

Thomson Reuters - Software Developer

May - Aug 2018

- Automated project infrastructure for user identity management using **AWS CodePipeline** to ensure end-to-end continuous integration.
- Reduced build time by **over 40%** by parallelizing API and UI builds, saving over **6 minutes** per build.
- Fixed AWS ECS crash issue by caching API calls to reduce container CPU and memory usage by 70%+.

Geotab - Software Developer

Jun - Aug 2017

- Led the development of an HR automation system which drastically reduced redundancy in the hiring process for one of the fastest growing companies in Canada.
- Significantly increased company efficiency through creating an accurate resume parser and automating emails and calendar events with JavaScript.

ViceroyMedia - Full-Stack Developer

Jun - Dec 2016

- Collaborated with a team to develop an Exam Network web app for the University of Guelph.
- Implemented a file system for course materials using JavaScript, including viewing, uploading, and downloading files.
- Integrated Facebook Login API for over 5000 students to be able to login to the application.

PROJECTS

Palm Vein Authentication System

Aug 2018

- Built a palm vein authentication system with over 93% accuracy using Python, OpenCV, and TensorFlow using infrared LEDs and a RaspberryPi.
- Over 2.5k views on Hackster.io, to be featured in Make Magazine for over 300k subscribers.

Exam Parser & Web Application

Sep 2016

- Securely handled **over 200 user accounts** using **PHP** and **MySQL**, implementing industry standard database security measures (hashing, salting, etc).
- Developed a **Node.js** script to accurately parse PDF practice exams and output self-marking online forms to a web application, including a login system with admin access.

AWARDS

MasseyHacks III - 3rd Overall & Best Hardware

Apr 2017

• Engineered a device for the blind which speaks out the word that a user hovers their finger over on a physical page of text using a **Raspberry Pi**, **Node.js**, **MongoDB**, and **Python**.

Loran Scholarship - Semi-Finalist

Nov 2016

• Recognized in the top 8% of applicants for Canada's most prestigious scholarship.