Ibrahim Irfan

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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 and deployments for user identity management using AWS CodePipeline to ensure end-to-end continuous integration, saving numerous hours per week.
- Reduced build time by **over 40%** by parallelizing API and UI builds, saving over **6 minutes** per build.
- Fixed AWS ECS crashing by caching API calls to reduce container CPU and memory usage by **70%+**.
- Securely developed many significant API endpoints in **.NET** for user base functionality.

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 - Hack the North 1st Place   Aug 2018
- Built a palm vein authentication system with over **93% accuracy** using **Python**, **OpenCV**, and **TensorFlow** using infrared LEDs and a RaspberryPi.
- Used image processing techniques to consistently reduce noise and skeletonize the vein image.
- Over **2.5k views** on Hackster.io and to be featured in Make Magazine for **over 300k readers**.

Point-To-Speech - MasseyHacks III 3rd Place & 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**.
- Integrated OCR to accurately identify words and used LeapMotion to map hand position in space.

Exam Parser & Web Application   Sep 2016
- Securely handled **over 200 user accounts** using **PHP** and **MySQL**, implementing industry standard database security measures such as hashing and salting.
- 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.

Education

University of Waterloo - Bachelor's of Software Engineering   2017 - 2022
- 93% CGPA with 2 consecutive top decile and Dean's List awards.