Dilraj Devgun

dilrajsinghdevgun@gmail.com
425-279-3444
github: github.com/thejarlid
portfolio: thejarlid.github.io

EDUCATION

University of Washington
Bachelor of Science
Computer Science GPA: 3.75
August 2015 - June 2019

SKILLS

C, C++
Swift
Objective-C
Java
C#
Python
Typescript
React
MySQL
Docker
Databases
Systems Development
Operating Systems
Embedded Systems
iOS Development
Distributed Systems
Web Development
Computer Vision
Machine Learning
Firmware/Drivers
Problem Solving
French
Teaching
Public Speaking

EXPERIENCE

Software Engineer
Microsoft │ HoloLens Systems, Firmware, and Drivers Team
Redmond, WA │ Aug 2019 - Present

- Developed firmware for the SoC and HPU, a custom ASIC, on the HoloLens, IVAS Project, and future AR devices.
- Integrated sensors and assisted device bring up by writing drivers and providing higher level APIs for consumers
- Tripled frame rate for IVAS cameras by implementing a shared memory buffer library outperforming benchmarks
- Maintained a set of internal C++ tools that record, analyze, and replay streams of sensor data to debug runtime algorithms
- Implemented novel computer vision algorithms to calibrate display and cameras in factory pipelines decreasing factory costs and increasing output yields by 50%

Software Engineering Intern
Microsoft │ Universal Store Team
Redmond, WA │ June 2018 - August 2018

- Proposed an internal version control extension to model and manage services eliminating 100% of manual overhead
- Full stack development of the extension and microservice to manage the service database using .NET Core, Angular, C#, and TypeScript

Operating System and Hypervisor Researcher
University of Washington CSE
Seattle, WA │ January 2018 - January 2019

- Assisted the implementation of a user-level thread library as part of a team effort to extend a unix OS into a hypervisor that supports multiple paravirtualized guest OSs and containers

iOS Engineer
Freelance
Seattle, WA │ June 2014 - Present

- Extensive familiarity with Swift, Objective-C, and the iOS SDK to build custom native user interfaces and reliable and reusable components to interface with backend services
- Led a team through ideation, design, and implementation of an App which Apple Featured as Best New App in Germany, Sweden, and Austria
- Developed a user focused productivity tool https://merakiapp.co with Firebase, Realm, Swift, and React