Portland, OR github.com/MustafaAlshehab mustafaalshehab.github.io

Mustafa Alshehab

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Employment

Software Engineer Intel Dec 2021 - Present

- DevOps: Kubernetes | Docker | Ansible | Python | Jinja | Linux | AWS
 - Maintain and support Intel open-source Container Experience Kit project by adding features and bug fixes
 - Improved CEK code base by suggesting code best practices and documenting it
 - Support and maintain Workload Service Framework project
 - Lead 5G workloads integration, enablement, testing, and optimization on Intel infrastructure
 - <u>Leveraged Knowledge</u> in Kubernetes, Docker, Python, Bash scripting, Linux, Windows 10, Ansible, Jinja, Git, ssh, Microsoft VS Code

Software Engineer

ON Semiconductor

Jun 2018 - Present

- Embedded/Firmware/ Back-end development: C/C++ | Qt | ARM | Bluetooth Low Energy (BLE) | UART | I2C
 - Developed a feature for Strata Developer Studio to communicate to a client wirelessly within a local network
 - Maintain and support the development of Strata Developer Studio
 - Developed firmware for bare-metal MCUs to communicate serially with Strata Developer Studio
 - Developed a firmware with both BLE GAP peripheral/central roles and GATT server/client roles to search, connect, and exchange data with other BLE devices
 - <u>Leveraged knowledge</u> in C/C++, Qt/QML, CMake, Git, TCP/IP, ARM Coretex-M3 architecture, Memory Pool, debugged using Oscilloscope, Digital Multimeter, and JTAG/SWD debugging interface
- DevOps: Docker | Jenkins | Python | Linux | Windows | SDK | Qt installer
 - Reduced dependencies conflict by 50% by eliminating multiple OS build support by utilizing Docker
 - Created and maintained Linux Ubuntu Docker image with the tools/dependencies to build firmware
 - Automated the build process by using Bash scripts, CMake, and a modified VS Code interface
 - Reduced start of Strata development time by 90% by making an SDK installer with concise documentation
 - Reduced building time of Strata Developer Studio by 70% after the initial build
 - Architect and developed automation process for Strata deployment utilizing Jenkins pipeline
 - Automated Strata Developer Studio release testing utilizing Python and PowerShell scripts
 - <u>Leveraged knowledge</u> in Docker, Jenkins, CMake, Windows WSL, JavaScript, Bash scripting, PowerShell, Linux, MacOS, Windows 7, Windows 10, Qt installer, Inno Installer, Microsoft VS Code
- GUI and Front-end Development: Qt/QML | React | Redux | MongoDB
 - Developed QML interface for MQTT protocol along with a GUI for quick evaluation
 - Developed a reusable React component to show analytics data in a graph
 - Leveraged Knowledge in Qt/QML, JavaScript, C++, NPM, React, Redux, MongoDB, HTML, CSS

Teaching Assistance

Oregon State University

Sep 2016 - Mar 2017

- Hold weekly student help sessions and plan out homework with other TAs for the computer science II course

Education

Tempe, AZ Arizona State University

Mar 2022 - Present

• Master: Computer Science

Corvallis, OR

Oregon State University

Apr 2013 - Sep 2017

Bachelor of Science: Electrical and Computer Engineering – GPA: 3.36 out of 4

Skills

Programming Languages: C/C++, QML, Python, JavaScript, HTML, CSS, and Shell scripting (Bash) **Tools:** ARM toolchain, JTAG, RTOS, CMake, Git, Docker, React, React Native, Redux, and NoSQL (MongoB)