Mustafa Alshehab

Eastren Province, SA | +966 500483605 | mustafa.alshehab@hotmail.com | linkedin.com/in/mustafa-alshehab
github.com/MustafaAlshehab | mustafaalshehab.github.io

DevOps Engineer

A seasoned software engineer with industry experience in various software development areas including DevOps, web and desktop applications, and embedded systems. Has a passion for technology and a drive to excel in every project. Works seamlessly with teams or independently with a proven track record of success. Provides a dynamic leadership style to take charge of projects from inception to production, delivering exceptional results on time and within budget. Thrives under pressure and remains laser-focused on executing project deliverables with the utmost attention to detail.

AREAS OF EXPERTISE

Software Development | System Engineering | DevOps | Automation | CI/CD | GitHub | DNS| Networking
Python | Bash| Validation | Embedded Systems | Firmware Development | Debugging | C/C++
Containerization | Workload Engineering | Performance Analysis | Data Analysis | Docker | Kubernetes
Jenkins | Qt/QML | Windows | Linux | Leadership | Problem-Solving | Teamwork |Communication

PROFESSIONAL EXPERIENCE

Intel **Hillsboro, OR** **December 2021 - Present**

DevOps | Workload Engineering | Performance Analysis: Docker | Kubernetes | Ansible | Python | Linux | Bash
Enhanced and streamlined the integration, enablement, testing, validation, optimization, benchmarking, and creating performance collaterals of Extended Detection and Response (XDR) and networking workloads categories on Intel Xeon CPUs and its competitors to showcase platform features and bolsters customer confidence. Also, supported and maintained Intel Container Experience Kit project which simplifies the installation and configuration of Kubernetes clusters on Intel Architecture.

- Developed and maintained comprehensive workload performance collaterals, ensuring accuracy and timely delivery, to showcase platform features, resulting in increased customer interaction and adaption.
- Improved Wazuh workload execution efficiency by 73%, resulting in a substantial reduction of benchmarking time, validation processes, operational cost, and increase availability of resources.
- Identified and reported a security threat in the Git history of an external software release, safeguarding our clients' integrity, preventing costly repercussions, and maintaining trust in our products.
- Maintained and supported Workload Service Framework (WSF), which efficiently hosts numerous containerized workloads designed for both CISC and RISC architecture.
- Organized a technical sharing session discussing the System Activity Reporter (SAR) and its integration with the WSF, promoting knowledge exchange among participants, and increasing performance analysis productivity.
- Led and successfully managed the microservices hackathon initiative within the team from its inception to completion, ensuring early exposure to microservices within the team and increasing visibility for our internal microservices catalog which increases collaboration between internal teams and reduce redundancy.
- Started and finalized “FAQ Revamped” initiative, streamlining information accessibility for the WSF project, thereby enhancing team efficiency and overall productivity.
- Provided comprehensive coaching and mentorship to newly onboarded team members.
- **Leveraged Knowledge** in Docker, Kubernetes, Automation, Integration, Testing, Validation, Python, Bash scripting, Linux, KPIs (key performance Indicator), SAR (System Activity Report), EMON, htop, Windows 10, Ansible, Jinja, Git, SSH, VNC, XDR, Microsoft VS Code, Excel, PowerPoint, AWS.

onsemi **Beaverton, OR** **June 2018 – November 2021**

Embedded Systems | Firmware Development| Back-end Development: C/C++ | Bluetooth | TCP/IP | Qt/QML
Increased support for Strata Developer Studio platforms to include bare-metal Microcontroller Units (MCUs) and supported the overall project development process. Additionally, developed and test new features to expand functionality and enhance user experience.

- Developed a feature for Strata Developer Studio to communicate with a client wirelessly within the local network, an addition to the existing wired USB connection.
- Ensured the ongoing maintenance and support of Strata Developer Studio's development process.
- Developed a firmware for bare-metal MCUs enabling serial communication 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.
- **Leveraged knowledge** in C/C++, TCP/IP, Bluetooth, Wireless Connectivity, Qt/QML, CMake, Git, ARM Coretex-M3, ARM toolchain, Memory Pool, Debugging, Oscilloscope, Digital Multimeter, and JTAG.

DevOps | Validation | Automation: Docker | Jenkins | CI/CD | Python | Linux | Windows| SDK | Qt installer
Led Hello Strata project from its inception to completion, focusing on accelerating the Strata Developer Studio environment setup, deployment process, and firmware development process. The project aims to enhance user experience and foster more efficient software development practices. In addition, developed, automated, and executed comprehensive test plans for hardware, and applications to ensure product quality.

- 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 firmware build process by using Bash scripts, CMake, and a modified VS Code user 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, significantly saving developers time and reduce operational costs.
- Architect, developed, and automated Strata Developer Studio deployment and release testing and validation process utilizing Python, Jenkins pipeline, Bitbucket pipeline, and PowerShell scripts.
- **Leveraged knowledge** in Docker, Jenkins, CI/CD, Automation, Validation, Bitbucket Pipeline, CMake, Windows WSL, Python, JavaScript, Bash, PowerShell, Linux, MacOS, Windows 7/10, Qt Installer, Inno Installer, VS Code.

Front-end Development: Qt/QML | React | Redux | MongoDB
Developed numerous user interface components using Qt/QML and React framework specifically tailored to support Strata Developer Studio functionality and enhancing user experience.

- Developed QML interface for MQTT protocol along with a GUI for quick evaluation.
- Developed React components to show graphical analytics data to be used in the main analytics page.
- Developed a PoC of Strata client and Strata sever GUI to demonstrate wireless connections functionality.
- **Leveraged Knowledge** in Qt/QML, JavaScript, C++, NPM, React, Redux, MongoDB, HTML, CSS.

Oregon State University **Corvallis, OR** **September 2016 - March 2017**
Teaching Assistance
Supported the academic needs and learning experiences of students for Computer Science II course.

- Assisted the professor in proofreading assignments and provided suggestions for improvements.
- Evaluated student learning through the grading of assignments and delivery of constructive, detailed feedback to facilitate academic growth and improvement.
- Facilitated weekly student assistance sessions and collaborated with fellow TAs to plan assignments.

EDUCATION

Bachelor of Science, BS, in Electrical and Computer Engineering, Oregon State University, Corvallis, OR