Emmett Lam

425-286-7699 · lam.emmett@gmail.com
lamemmett.github.io · **Linkedin**.com/in/emmettlam

EDUCATION

University of Washington Seattle, WA **Sep 2011 – Dec 2015**
B.S. Electrical Engineering: Embedded Computing Systems

HIGHLIGHTS

- 6 years embedded software experience pushing products through highly-regulated industries (FDA, FAA)
- Proactive engineer with excellent interpersonal and communication skills
- Proficient in C/C++, Python development environments
- Linux/Embedded Android device bring-up on ARM microcontrollers
- Design and implementation of CI/CD pipelines via Jenkins, Docker and Bamboo
- HW/SW interface development (timers, interrupts, hardware peripherals ie. SPI and ADCs)
- Strong EE fundamentals and HW/SW debugging skills (Logic analyzers, oscilloscopes)
- Requirements writing, verification tests, and thorough documentation experience

SKILLS

General

- C/C++ for embedded systems
- Embedded Linux/Android platforms
- Linux device drivers
- Communication protocols (UART, SPI, I2C)
- Git/Mercurial Distributed VCS
- Build systems administration (Jenkins, Bamboo)
- Docker, AWS ECS
- CI/CD pipeline design
- Distributed build systems
- Python/Bash scripting for task automation

Languages

- C, C++, Python, Bash, Java, JavaScript

Tools

- Git, JIRA/Atlassian toolsuite, Bamboo, Jenkins, Docker

EXPERIENCE

PRO Unlimited @ Facebook Reality Labs ***Embedded Software III*** **Oct 2020 – Present**

- Update and maintain Linux device driver for ingestion of streaming camera/sensor data
- Verify camera timestamp alignment for synchronizing camera streams from multiple devices
- Write test application suite for interfacing with device driver
- Automate test suite to run on code check-in and integrate with existing CI infrastructure
- Perform periodic FW release testing and produce test reports

Kestra Medical Technologies Inc. ***Embedded Software / Build Engineer*** **Mar 2018 – Jul 2020**

- Integrated new features and bugfixes for C++ applications running on ARM Linux system
- Administrated Bamboo/Jenkins build system for test automation and deployment of production software
- Migrated build workflow to Docker containers hosted on Amazon ECS
- Automated Klocwork static code analysis reports upon Git check-in and SW releases
- Produced requirements-based verification test protocols
- Developed automated test scripts (Python)

Crane Aerospace & Electronics ***Embedded Software Engineer I*** **Feb 2016 – Feb 2018**

- Created low-power embedded systems (MPC565 platform) for processing analog sensor input
- Designed software requirements to be agreed upon by customer (IBM Rational DOORS)
- Developed safety-critical production software (C, Eclipse, Visual Studio)
- Conducted software unit test (C++) against target hardware simulator
- Performed internal design/code reviews