Emmett Lam

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EDUCATION

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

Cloud Native Computing Foundation (CNCF) **Aug 2020 – Present**
Kubernetes Administrator Certification

HIGHLIGHTS

- 5 years embedded software experience pushing products through highly-regulated industries (FDA, FAA)
- Proficient in C/C++, Python development environments
- Linux platform development on ARM cortex microcontrollers
- Design and implementation of CI/CD pipelines via Jenkins, Docker and Bamboo
- Hardware level software 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
- Excellent interpersonal and communication skills

SKILLS

General

- C/C++ for embedded systems
- Embedded Linux platforms
- Python/Bash scripting for task automation
- Git
- Build systems administration (Jenkins, Bamboo)
- Docker and containerization
- AWS/remote instance administration
- Kubernetes administration
- Communication protocols (UART, SPI, I2C)
- Static code analysis tools (Klocwork, LDRA)

Languages

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

Tools

- Git, JIRA, Bamboo, Jenkins, Docker, Eclipse, Quartus

EXPERIENCE

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

- Integrate new features and bugfixes for C++ applications running on ARM Linux system
- Administrate Bamboo/Jenkins build system for test automation and deployment of production software
- Migrate build workflow to Docker containers hosted on Amazon ECS
- Automate Klocwork static code analysis reports upon Git check-in and SW releases
- Produce requirements-based verification test protocols
- Develop 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

Systems Engineering Intern **Jun 2015 – Sep 2015**

- System verification testing of the Door Sensing System to be deployed on the COMAC C919 commercial aircraft