Elijah Kloft

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Professional Summary

Experienced embedded software developer seeking a fulfilling role utilizing my expertise in developing software for embedded systems and IoT devices. I bring a strong understanding of programming languages such as C, C++, and Python, as well as experience with revision control and infrastructure as code. Seeking to apply my skills to develop high quality software which makes the world a better place.

Work Experience

Jaguar Land Rover, Portland OR – *Senior Systems Engineer* - February 2022 to Present
- Operated within a multi-disciplinary product team to define the system design specification and requirements for the new Driver Situational Awareness project.

Jaguar Land Rover, Portland OR – *Systems Engineer* - July 2019 to February 2022
- Migrated JLR's telematics source code from AWS to GCP, while making the system robust through infrastructure as code. Built the project structure in Gitlab using Terraform, which also handled user management. Automated stages of the Gitlab pipeline.
- Developed support for portable, identical working environments for everyone on the team with Vagrant Boxes managed by Ansible.
- Managed packages and dependencies automatically through Conan.
- Automated our semantic versioning, and inter-project triggering system via our internal CI/CD tooling. This allowed a change to be fully propagated downstream to ensure compatibility with the rest of the system.
- Created tooling to assist in QNX Hypervisor builds and flashing. Used CAN messages for keepalive. Integrated QNX BSP's, made OS images, created Linux kernels.

Measuretek, Albany OR - *Systems Engineer* - March 2016 to July 2018
- Installed and calibrated sensor equipment in hop drying kilns. Trained clients in the use of our software. Performed troubleshooting on the system, tracking down faulty sensors and fixing them.
- Installed multiple irrigation valve systems, allowing water pressure / flow sensors to be read and allowing valves to be turned on/off remotely, or on a schedule. I designed a user interface to neatly display the valve states for the client. I programmed the interface between our Campbell Sci data loggers and the Nelson TWIG irrigation control unit.
- Programmed Banner Engineering wireless radios for both soil moisture monitoring stations as well as weather monitoring base stations, allowing clients to get a fuller picture of what's happening in their fields.

Education

Graduated June 2016

Oregon Institute of Technology, Klamath Falls OR - *Bachelors of Science, Software Engineering Technology & Associates of Science, Computer Engineering Technology*

Senior Project - *Java, SQLite, Arduino Uno*
Created a 'Solo Clay Pigeon Thrower'. Developed an Android app which communicated via Bluetooth to an Arduino. When wired to a small electric motor, it could activate the firing mechanism on the clay pigeon thrower, allowing a single user to both activate the thrower (after a time delay), as well as shoot the target.

Junior Project - *C++, Teensy® USB Development Board*
Designed and built a 'Retro Controller Hub' allowing a user to plug in a SNES, NES, or N64 controller into their pc via USB. Now you can play old school emulated games, but with their original controller, on your pc.

Skills
- C, C++, Python
- Git revision control
- Agile / Scrum