

JOSAPHAT VALDIVIA

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Rochester, NY

OBJECTIVE

I'm Jos, a passionate Software Engineer looking for remote or hybrid full-time employment in Systems Programming and related fields. My career is primarily focused on lower-level C and C++ development (more than half of my career is on embedded systems), but I like to be a generalist who brings to bear a wide breadth of experience to problem solving.

I am most interested in opportunities developing software for new or emerging technologies.

EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, NY
B.S. Computer Engineering, Software Engineering Option
May 2015

EXPERIENCE

Glowforge, Seattle, WA (Remote)

SENIOR SOFTWARE ENGINEER (November 2022 – February 2024)

- Individual contributor on firmware for Glowforge Aura.
- Developed Jenkins build server and bitbucket pipelines.
- Led adoption of CMake build system as part of multi-platform source unification.
- Converted legacy on-target tests to Google Test suite on the development machine.

Datto, Rochester, NY (Hybrid)

SENIOR SOFTWARE ENGINEER (May 2022 – November 2022)

- Developer on BCDR Agents.

Independent Contracting, Remote

September 2021 – January 2022

- This was a shorter-term project undertaken by personal request.
- Porting of low-level embedded software for an NFC Point of Sale to new hardware platforms based on NXP and ARM technology.
- Refining of git development workflows and repository structures.
- Developed and maintained a CMake-based build system parallel to the MCUXpresso project files.

REDCOM, Victor, NY

SENIOR SOFTWARE ENGINEER (May 2021 – May 2022)

SOFTWARE ENGINEER (December 2019 – May 2021)

- Developer on Sigma system.
- Led adoption of increased tooling, including git, clang-format, and clang-tidy.
- Championed Test-Driven Development techniques and increased test coverage.
- Led design of new subsystem for managing communications with tactical radio networks, as well as new backend subsystem for call management in a virtual switchboard-like tactical communications application.

Token (formerly Case Wallet Inc), Rochester, NY

LEAD FIRMWARE ENGINEER, FOUNDING TEAM (June 2018 – December 2019)

EMBEDDED SOFTWARE ENGINEER, FOUNDING TEAM (June 2014 – June 2018)

- Developer of firmware powering Case, primarily C99.
- Primary architect of Token firmware using strong object-oriented design principles.
- Led adoption of modern C++ for firmware development.
- Integrated peripherals using serial comms for devices including accelerometers, fingerprint sensors, NFC controllers, and others.
- Developed Token build system using CMake, and continuous delivery pipeline using Jenkins.
- Advocated for use of TDD. Gained experience using Google Test and later Catch2.
- Created “The Box” assessment for new firmware dev hires.
- Retrofitted FreeRTOS onto previously collaborative event-driven architecture.

Brand Networks Inc., Rochester, NY

STUDENT SOFTWARE ENGINEER (November 2012 – May 2013)

- Developed web applications primarily using PHP with Wordpress.

SKILLS

Bilingual: Skilled communicator in English, fluent in Spanish

Quick learner: Can perform unfamiliar tasks with proficiency in short order

Polyglot Software Developer: *Expert in C++ and C; Competent with CMake, Bash, Python, Java; Familiar with ARM Assembler, Go, PHP, Rust, C#, VHDL, Scheme*

Embedded OS Experience: FreeRTOS, QNX

Proficient OS User: GNU/Linux (Debian, Arch Linux), FreeBSD, Windows, macOS

Other Tools: emacs, zsh, vim, git, Postgres, Qt, L^AT_EX, GNU Linker (ld)

HOBBIES

Music: Play guitar regularly

Board games: Personal collection includes several dozen board and card games.