

# ANDREW LOEBS

## Embedded Software Engineer

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### EXPERIENCE

#### **DOJO FIVE** | St. Paul, MN (remote)

Staff Embedded Software Engineer | July 2025 – *Present*

Senior Embedded Software Engineer | April 2023 – July 2025

- Embedded software lead for commercial IoT device.
- Implemented Z-Wave S2 security stack for embedded Z-Wave controller.
- Optimized boot time of embedded linux system to reduce time-to-first internet connection by 25%.

Skills Utilized: C/C++, Python, Rust, ARM Cortex-M, FreeRTOS, Linux, Z-Wave, and Git.

#### **META** | Redmond, WA

Senior Embedded Software Engineer | January 2022 – April 2023

- Lead integration effort for multi-hop/multi-transport communication path comprising firmware from multiple teams.
- Member of team that developed inter-process communication framework used in multiple AR/VR products.

Skills Utilized: C/C++, Python, RISC-V, ARM Cortex-M, Zephyr RTOS, Linux, Android, and Mercurial.

#### **KINETIC VISION** | Cincinnati, OH

Firmware Engineer | January 2020 – December 2021

- Rewrote NAND flash management stack for low-power data logger that eliminated in-field file system errors.
- Maintained internal Python tools for testing and data collection of a large-scale, distributed robotics platform.

Skills Utilized: C/C++, Python, ARM Cortex-M, Linux, Docker, and Git.

#### **XACT MEDICAL** | Cincinnati, OH

Firmware Development Engineer, Contract | February 2018 – January 2020

- Developed two-axis robotic control system capable of high-speed movements with sub-millimeter accuracy.
- Core team-member of NSF funded project for dynamic compensation of medical robot based on user and patient movement.

Skills Utilized: C, Python, PIC/dsPIC, MARG sensor fusion, and Git.

#### **INTELLIGENT GREEN PRODUCTS** | Cincinnati, OH

Firmware Development Engineer, Contract (Part-time) | February 2018 – January 2020

- Implemented Bluetooth Low Energy communications stack in IoT device to enable Android and iOS connectivity.
- Integrated real time sensor inputs and user settings to develop flow control scheme for smart shower system.

Skills Utilized: C, dsPIC, Bluetooth Low Energy, and Git.

#### **BLUELINE DRAFTING** | Cincinnati, OH

General Engineering Services, Contract | May 2015 – Feb 2018

- Created suite of drafting automation tools that significantly reduced time spent by employees in the field.
- Developed software applications to increase standardization and quality control of customer deliverables.
- Drafted architectural and engineering building design documents.

Skills Utilized: C#/.NET, AutoCAD LISP, AutoCAD, and Git.

## EDUCATION

**CINCINNATI STATE TECHNICAL AND COMMUNITY COLLEGE** | Graduated July 2015

A.A.S. in Mechanical Engineering Technology | **GPA:** 3.96

- **Core Coursework:** Machine Design, Kinematics, Applied Thermodynamics, Statics and Strength of Materials.