

Maxwell Beck

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Education

Computer Science B.S.

Univeristy of Wisconsin-Madison

2021–Expected 2025

Experience

Associate Embedded Software Engineer

Extreme Engineering Solutions – Verona, WI

Winter–Summer 2023

- Worked on a small focus team to resolve show-stopper bugs
- Assisted hardware engineers with firmware for upcoming processor platform
- Ran testing to drive and verify product requirements

Software Engineer

Stuttgart Inc. – Crystal Lake, IL

Summer 2022

- Maintained and implemented features on existing C and Python codebases
- Led software development for upcoming products in C++ utilizing libuv
- Resolved device tree issues for a custom board based on a Variscite i.MX8M MINI module

Engineering Services Technician

Stryker Sage – Cary, IL

Summer 2021

- Redesigned and improved test fixture in preparation for product launch
- Tested products slated for limited launch

Projects

Light-Up Name Badge

- Designed a fully custom circuit board utilizing a SAMD21 MCU in KiCAD
- Programmed with custom Rust firmware including sound reactivity using CMSIS-DSP

Caustic Dreams

Four-kilobyte procedural image

- Implemented a subset of Tizian Zeltner, Iliyan Georgiev, and Wenzel Jakob's *Specular Manifold Sampling* algorithm
- Represented scene geometry using signed distance fields

Skills

Programming Languages: Rust, Java, C, C++, JavaScript, TypeScript, Python, GLSL, Mathematica, Assembly

Technologies: Linux, Git, Docker, Nix, OpenGL, WebGPU

General: Leadership, Teamwork, Communication, Work Ethic, Public Speaking, Problem Solving