

Jesse Taube

Embedded Software Engineer
University of Massachusetts Lowell

XXXXXXXXXX

✉ Mr-Bossman075@gmail.com

🐙 GitHub Profile

🌐 LinkedIn Profile

TECHNICAL SKILLS AND INTERESTS

Languages: C, C++, Shell, Verilog, Python, JS/Node, HTML+CSS

Tools & Technologies: Git, KVM, Linux Kernel, U-Boot, GNU tools, Automake, KiCad

Protocols & Libraries: Networking, TCP/IP, I²C, SPI, RS232, AMBA, C&C++ STL, OpenCV, LibAV

Hardware: Experienced with reading schematics, using oscilloscopes, multi-meters and low speed routing

Areas of Interest: Embedded Linux, IOT and IOT security, RTOSs, Baremetal and Firmware

PERSONAL PROJECTS

• Linux Ports

Porting of IMXRT to the Linux Kernel

- Writing Kernel drivers in C and Device Trees
- Debugging over JTAG with GDB
- Using agile development with co-developers

• KISC-V

A KISS principle RISC-V32I CPU, written in SystemVerilog

- Written in SystemVerilog and debugged with GTKWave
- Micocode generation in Python
- Custom trap handler in C and Assembly to emulate CSR instructions
- Can run No-MMU Linux

• Personal Blog

Blog with backend in NodeJS hosted Locally

- Dynamic and static pages in NodeJS using Express
- JQuery and Bootstrap for frontend
- Locally hosted on servers running cockpits KVM

EXPERIENCE

• D3 Engineering

Intern Kernel developer, on the Nvidia Jetson Team

May 2023 - Aug 2023

Rochester, New York

- Linux Kernel driver development in C for GMSL and FPD-link cameras.
- Writing device trees and device tree overlays.
- Reading schematics and datasheets.
- Working with oscilloscopes and multi-meters.
- Debugging hardware and software issues, such as MIPI CSI dataloss.

• Part-time Freelancer

Hardware and Software developer

Jun 2018 - Present

Hybrid

- Writing Kernel drivers for custom hardware.
- Development of custom test boards.
- UL certified SOM based custom motor control board with HDMI.
- Programing tutor for University and Highschool students.

• Microcenter

Customer Service Representative

Feb 2022 - Jan 2023

Cambridge, Massachusetts

- Communication with management and customers.
- Diagnosing and helping customers with computer problems.

EDUCATION

• University of Massachusetts Lowell

Bachelor of Computer Engineering

2022-26

• Newton South High School

LigerBots - FRC team 2877

2022

Science team