

Maksim Sorin

414-379-2728 | Max.Sorin.S2000@gmail.com |
linkedin.com/in/maksimsorin |
Max-Sorin.com

Education

University of Wisconsin- Milwaukee

Bachelor of Science in Electrical Engineering

Milwaukee, WI

June 2018 – December 2021

Experience

Embedded Software Engineer (On-Board Charger) - LiveWire EV

January 2022 – Present

- Developed optimized cooling loop control algorithms in C using lookup tables that reduced EV charging times by 25%
- Scripted and automated functional circuit testing using C++ and BusMaster for PCBs which removed any user error from testing and catches premature circuit failures in early stages of the power electronics build
- Developed sensor offset nulling code in C which removed any sensor noise upon startup of the vehicle and enabled more accurate reading of voltages and currents throughout operation, increasing range by up to 3%
- Developed rate of charge calculation and broadcasted it onto the instrument cluster via CAN. Used internally by our team to verify charging rates, and a critical feature used externally by customers to see vehicle charging speed.
- System on Chip throughput analysis which identified bottlenecks within our code that previously caused overrun errors. Able to pinpoint specific areas of code which were then optimized to reduce throughput by up to 20%
- Resolved and rectified 50+ compiler warnings within our embedded C codebase, enhancing code quality and ensuring a smoother development and deployment process

Electrical Engineer Co-Op – Harley-Davidson

May 2020 – December 2021

- Transferred an entire product requirement document into a requirements management program (Helix ALM) for a massive organizational increase
- Developed and wired a “mini” Hardware in the Loop (HiL) system to simulate engine circuit behavior
- Created requirements for the Harley Davidson Pan America “Quick Shift” which enabled completely clutch-less shifting without damage to the transmission

Projects

Digital Clutch Slipper | C++, Swift, Xcode, Arduino

September 2022 – Present

- Developed a Bluetooth iOS app in Xcode using Swift completely from scratch to interface with an Arduino to be able to tune the clutch slipper device from the cabin of the vehicle
- Developed all Arduino code (C++) to be able to control the physical clutch slipper device
- Developed all of the circuitry to be able to run and power this device from a 12v car battery
- Work in Progress

Personal Website | Django, HTML, CSS

January 2024

- Developed a full stack personal website using Django and CSS
- reCAPTCHA API used to protect my email and personal information from spam and bots
- Protected using CloudFlare
- Usage statistics are monitored continuously on the backend for me to view

Technical Skills

Languages: Python, C/C++, MatLab, HTML, CSS, Swift

Developer Tools: Git/GitHub, VScode, Jira, Vector and ATI CAN diagnostic tools, s32 Design Studio, JTAG debugging, MISRA C Coding standards, Unit Testing, UDS Diagnostics