WORK EXPERIENCE:

General Motors

June 2021 – Sept 2024

Embedded Software Engineer

Feb 2023 – Sept 2024

- Developed software to test ethernet communication between components
- Implemented two high speed ethernet controllers for sensor input
- Improved controller throughput from one hundred megabit to one gigabit
- Debugged incorrect register configurations set by vendor
- Debugged network level issues preventing data flow and timestamping
- Identified issues with incorrect payloads that affecting service mapping operations
- Developed training guide for embedded debugging and software build process
- Recommended processes that reduced build time from 6 minutes to 3 minutes
- Upheld network testing visualization for in-vehicle communication
- Implemented common microcontroller to more than ten electronic control units
- Saved the company ~ \$15-25M over five years by reducing hardware complexity

Radar Development Engineer

July 2022 – Feb 2023

- Enhanced GPS accuracy error from meters to centimeters using OXTS calibration tool
- Streamlined test data to create an automated radar performance report
- Created onboarding guide that facilitated training of new team members

Data Analyst

June 2021 – July 2022

- Led DFSS project in Power BI automating a cadence visualization for program management
- Saved managers and planners combined fifty hours per month with automated visualization
- Significantly improved accessibility from less than ten users to over five hundred users
- Maintained dashboard for over two years due to increasing usage
- Recognized as the most intuitive timing dashboard by dozens of users

INTERNSHIP/STARTUP EXPERIENCE:

Mvcroft AI

June 2020 – Aug 2020

Hardware Engineer Intern

- Minimized potential PCB manufacturing errors by optimizing via placements
- Reduced prototype assembly time by three weeks to deliver to a hospital's COVID patients
- Introduced wiring techniques that conserved space within mechanical prototypes

SKILLS:

Lauterbach, C, Python, Power BI, Software Integration, Oscilloscopes

ACTIVITIES & ORGANIZATIONS:

Research Assistant – Center for Remote Sensing of Ice Sheets	May 2019 – Dec 2020
Scribe – IEEE HKN	May 2020 – May 2021
Teaching Assistant – Circuits & Electronics Lab	Jan 2019 – May 2021
Teaching Assistant – Digital Logic Design	Aug 2019 – Dec 2019
Head Coach – Royal Oak FC	Aug 2021 – June 2023

EDUCATION:

University of Michigan – Ann Arbor

M.Eng. Electrical & Computer Engineering

University of Kansas – Lawrence

B.S. Electrical Engineering | GPA: 3.66/4.00

Aug 2023 – Expected Dec 2024

Aug 2017 – May 2021