

# Nathan Silverman

650-773-8924 • nzsilver@umich.edu • www.github.com/nzsilverman

## EDUCATION

### University of Michigan

*Bachelor of Science in Engineering in Computer Science*

GPA: 3.48 / 4.0

Coursework: Operating Systems, Algorithms and Data Structures, Web Systems, Computer Security

**Ann Arbor, MI**

*May 2020*

## EMPLOYMENT

### Cosmic Advanced Engineered Solutions

*Software Engineer, Intern*

**Colorado Springs, CO**

*May 2019 - August 2019*

- Built network monitoring program to parse and collect network traffic as it travels through a modem.
- Developed communication and device command tools for embedded Linux devices.
- Designed and created a full stack web application that presents collected network activity data and allows an operator to control collection devices that are in the field.
- Spearheaded development of software that receives and handles network activity data sent from devices in the field. Included database operations and inter process communication.

## PROJECTS

### Automated Drone Mounted Synthetic Aperture Radar Collection

*Project Lead, Software Engineer*

**Ann Arbor, MI**

*January 2019 - December 2019*

- Led a team of five students in working with Radiant Solutions to design an end to end automated radar collection system mounted on a DJI Matrice 600 Drone.
- Developed software to communicate between a radar collection board and an embedded Linux computer to facilitate remote radar collection during drone flight.
- Led design reviews and weekly meetings to evaluate progress and receive feedback from the project stakeholders at Radiant Solutions and faculty mentors.

### University of Michigan Solar Car Team

*Embedded Systems Engineer, Solar Car Driver*

**Ann Arbor, MI**

*September 2016 - September 2018*

- Worked on a small team of approximately 20 students to design, build, and race a solar car 3000 km across the Australian Outback in the 2017 Bridgestone World Solar Challenge.
- Assembled, tested, and debugged custom printed circuit boards needed for the car to operate.

### Carpool Scheduling Software

*Personal Project*

**Ann Arbor, MI**

*July 2019*

- Designed carpool scheduling software for the University of Michigan Climbing Club that matches dues paying club members seeking a ride with available carpool drivers.

### Biologically Inspired Robotics and Dynamical Systems Laboratory (B.I.R.D.S)

*Research Assistant*

**Ann Arbor, MI**

*May 2018 - November 2018*

- Designed and built a thermal safety circuit designed to prevent motor overheating failure.

## TECHNICAL SKILLS

### Languages and Technologies

*Languages:* C++, C, Python, Bash, JavaScript, HTML, CSS, Matlab

*Technologies:* Docker, Git, Unix, React, SQL, ZeroMQ, Node.js