

# Miles Nash

(720) 475-0908 | miles.r.nash@berkeley.edu | Berkeley, CA 94720

## Education

University of California, Berkeley Dec 2025  
*B.S. Electrical Engineering and Computer Science* GPA: 3.7

Relevant Coursework: Electrical System Design, Embedded Systems, PCB Design, Physics, Microelectronics, Computer Architecture, Digital Design (ASIC), Microfabrication, Networks, Data Structures, Computer Programming, Data Science, Discrete Mathematics, Ham Radio

## Professional Experience

Microsoft | *Technical Program Management Intern, Cloud Innovation* Summer 2025

- Improving efficiency and security of AI Infrastructure

Tesla | *Engineering Program Management Intern, Vehicle Programs*

August 2023 - August 2024

- Technical product owner for keycards, keyfobs, and 2025 Model Y passive entry
- Led an interdisciplinary team of 15 to design, source, test, certify, and mass produce next-generation Tesla wireless hardware system
- Began implementing \$XX million annual cost-down after coordinating system level testing and leading an executive review
- Managed DFM, prototype builds, and production line bring-up with suppliers across three continents through weekly calls

Lockheed Martin | *Software Engineering Intern*

Summer 2021

- Developed a momentum management algorithms for new commercial satellite in C and Matlab Simulink
- Worked as part of a 15 person team to integrate my code into the larger Guidance Navigation, and Controls System

Lockheed Martin | *Manufacturing Engineering Intern*

Summer 2020

- Led a nationwide team of 25+ interns to execute a virtual STEM outreach event for young students
- Applied Lean Six Sigma methods to streamline flight hardware manufacturing and earn a perfect internal audit score

Lockheed Martin | *Electrical Systems Engineering Intern*

Summer 2019

- Aided in power system development, testing procedures, and electrical integration for JCSAT-17 thermal vacuum testing
- Reviewed PCB layout documents against component documentation and corrected errors for future missions

## Technical Projects

### 3-Stage ASIC CPU

Implemented Risc-V ISA and 4KB direct mapped cache in Verilog HDL for SKY130 PDK. Simulated RTL, debugged, synthesized, placed/routed, and analyzed using industry standard VLSI EDA tools from Cadence and Synopsys

### 3D Printer Host (side project)

Created a hardware/software system to monitor and remotely control my 3D printer with Alexa.

3rd place Tinkernut Home Automation Contest

### Light Organ PCBA

Designed a system to visualize the effects of digital and analog filtering on a received audio signal. Selected components, created schematic/layout, and received fabricated PCB

Final project of [Berkeley PCB design Class](#)

### Robot Car

Developed a voice controlled rc sized car through semester long class. Used analog filtering, system ID, closed loop control, and principal component analysis to recognize and respond to audio keywords

## Extracurricular Leadership Experience

Cal Band | *Fundraising Coordinator (2022), Member*

2021 - 2024

- Raised \$100,000 in 24 hours as part of our yearly spring fundraising event
- Led a team to reach over 10,000 potential donors through Social Media and automated email marketing
- Memorized and performed 21 shows across three years as part of the University Marching Band. Member of Public Relations Committee

ASD Independence | *Cofounder, CTO*

2021- 2022

- [Big Ideas Finalist](#) One of 16 finalist teams among 400 participants from throughout the UC system
- Pitched, developed mockups, conducted customer research, and evaluated the technical feasibility of a stimulus altering AR device

Chatfield Robotics Club | *Cofounder and President*

2018 - 2021

- Led team to State Championship our rookie year by raising over \$7000, recruiting 30 members, and building two FTC robots
- Coordinated part orders, moderated design discussions, and mentored younger engineers and leaders

NASA HUNCH Project | *Lead Engineer*

2021

- Designed and produced 3 iterations of a 29 part error-proof trash ejection system for future missions
- Coordinated team to deliver prototype builds ahead of major design reviews with NASA engineers. Named one of four national finalists

## Skills and Interests

Interests: Engineering Leadership, Hardware/Software Integration, Embedded Systems, Autonomy, Hardware Technologies, Product Skills: Java, Python, C, Verilog, ASIC, PCBA, Altium, Silicon Fabrication, Digital/Analog Circuits, Touchscreens, Project Management Hobbies: Walks, Snowboarding, Marching Band, Indie Shows,