

---

## Education

Cal Poly, San Luis Obispo	Graduated June 2019
BS in Physics, Minor in Computer Science	GPA: 3.7
Oregon State University	Graduated June 2021
MS in Computer Science	GPA: 3.7
Interests: Statistics, Data Science, Stochastic Systems, Information Theory, Programming Languages	

---

## Skills

Languages   TypeScript   JavaScript   C/C++   Python   Java   Bash   SQL   HTML   CSS   MatLab   Haskell  
Web   React   GCP   AWS   Node   Webpack   Redux   Flask   Firebase   Express.js   Jinja  
Other   Statistics   Embedded Systems   Data Analysis   Controls   Linux   U-Boot   git   Github   Jira   CI/CD   Jupyter

---

## Experience

SpaceX	November 2021 - Present
Firmware Engineer	
<ul style="list-style-type: none"><li>Parallelized initialization sequence on next-generation Starlink satellite phased array antennas to reduce boot time and increase developer productivity.</li><li>Developed software to control Starlink satellite actuators and relay telemetry to the flight computer.</li><li>Wrote a low-power demonstration application for an STM32 microcontroller to send GPS location over LoRA.</li><li>Worked remotely on a complex project with a large team of engineers.</li></ul>	
Oregon State University	September 2019 - June 2021
Graduate Research Assistant	
<ul style="list-style-type: none"><li>Applied statistical algorithms to develop a novel free space optical communication system.</li><li>Measured digital transmission metrics like SNR and BER in lab and analyzed data for publication.</li></ul>	
Graduate Teaching Assistant	
<ul style="list-style-type: none"><li>Taught and graded introductory courses for online data science MS program.</li></ul>	
Joby Aviation	Summer 2019
Embedded Software Intern	
<ul style="list-style-type: none"><li>Developed embedded software for an innovative electric passenger airplane.</li><li>Refactored core libraries to improve reusability and safety.</li></ul>	
Fullpower Technologies	Summer 2018
Embedded Software Intern	
<ul style="list-style-type: none"><li>Extended U-Boot bootloader to improve boot times of a consumer embedded system, the Sleeptracker Monitor.</li><li>Implemented several platform-specific features to improve boot performance of an embedded system.</li></ul>	
Project Jupyter	April 2017 - November 2017
Frontend Software Engineering Intern	
<ul style="list-style-type: none"><li>Did frontend web development for JupyterLab, an open-source data science platform with millions of users.</li><li>Used Electron to create a native version of JupyterLab. Added native UI features using React.</li><li>Worked directly with design team to create a compelling user experience.</li></ul>	
Cal Poly Satellite Research Lab	September 2015 - June 2019
Software Team Lead	
<ul style="list-style-type: none"><li>Led developers to create flexible, fault tolerant, and reusable systems software for CubeSats.</li><li>Worked with multidisciplinary team of engineers to fund, design, and assemble multiple satellites including PolySat's ISX, Exocube 2, DAVE, and LEO.</li><li>Developed and tested an attitude determination and control system for CubeSats.</li><li>Wrote Linux kernel module to handle interrupts from a GPS's pulse-per-second line and synchronize the clock.</li></ul>	

---

## Other

- Cal Poly William L. Frost Scholarship recipient.
  - Hobbies: Running, Basketball, Music, Reading
-