

EDUCATION

Olin College of Engineering | Needham, MA Systems Engineering with Entrepreneurship 2018 - Present

North Carolina School of Science and Mathematics | Durham, NC

2016 - 2018

EXPERIENCE

HASH AI | Platform Engineer

(NYC Sept 2019 - Present)

Venture-backed modeling and simulation tool for data-driven business decision making

- Architected WebAssembly build system and implemented core simulation functionality written in Rust
- Designed current implementation of production data visualization tools using TypeScript and React

Quartz Inc | Systems Engineer Intern

(SF May - Sept 2018)

Venture-backed SF startup that delivers a next generation intelligence system for large construction jobs.

- Designed and deployed industrial-grade camera and sensor hardware for live tower cranes in SF
- Developed real-time sensor data capture and photogrammetry integration software written in Rust
- Doubled wireless streaming and visualization performance with a suite of custom analytics software

LEAF Systems | Founder

(Boston 2017 - Present)

Angel-funded asset-tracking technology startup to improve automation, robotics, healthcare, and defense

- Developing novel hardware, firmware, and software to track the position of important assets in real time
- Finalist for MIT's Lemelson Student Prize, 100K Pitch, 100K Accelerate, and Fuse competitions

<u>Conrad Challenge Alumni Leadership Council</u> | Organization Development Lead (2017 - Present) Leadership position growing the Conrad Challenge as the #1 resource for student entrepreneurs

- Planned and ran events including a panel for the annual pitch competition at Kennedy Space Center
- Leading teams of alumni in forming strategic partnerships with schools and sponsors

Barbour Machine Inc | Manufacturing Intern

(Raleigh Summer 2017)

Position as a manufacturing consultant and machinist for local product development firms

- Developed Solidworks CAD and CAM for projects at Porticos product development firm
- Manufactured production injection molds and parts with CNC lathes, mills, and wire EDM

ACTIVITIES

Augmented Reality Research

(Olin 2018 - Present)

Developing GPU-accelerated algorithms for object registration in augmented reality using OpenCV

Olin College Catalyst | Board Administrator and Treasurer

(Olin 2018 - Present)

Coordinating Olin's entrepreneurial community and startup incubator

FIRST Robotics | Team #5511 Founder and Director

(Raleigh 2014 - 2018)

Founded and led an internationally competitive team of 30 students and raised over \$120k in 4 years

NASA HUNCH | Contract Engineer

(Durham 2016 - 2018)

Worked as a contractor alongside NASA Langley engineers to solve problems in space aboard the ISS

Designed injection molding system and asset tracking system launched via SpaceX to the ISS

Nuclear Fusion Research | Physics Researcher

(Durham 2016 - 2018)

Self-designed computational and experimental physics research into Inertial Electrostatic nuclear fusion

SKILLS & INTERESTS

- Software: Rust, C++, Python, TypeScript, CUDA, iOS, Java
- Hardware: Eagle/KiCAD, SolidWorks, HSMWorks (CAM), all machining tools (from lathe to Wire EDM)
- Other: Adobe Photoshop + Illustrator, Leadership, Public Speaking
- Passions: Entrepreneurial side projects, productivity tools, startups, hiking, and aviation