#### jkelley@olin.edu Jonathan Kelley jkelleyrtp.github.io/portfolio

(919) 928 - 3416

**EDUCATION** 

Olin College of Engineering | Needham, MA 2018 - Present

Electrical and Computer Engineering

North Carolina School of Science and Mathematics | Durham, NC 2016 - 2018

Research in Physics and Engineering

# SKILLS & AWARDS

Python, C, OpenCL/MP, Lua, Solidworks (CSWP)/Creo, Eagle PCB, EMWorks FEA

- CONRAD Spirit of Innovation International Challenge Winner
- High School Mathematical Contest in Modeling National Finalist
- FRC Event Winner (x3), Finalist (x1), World Championship Qualifier (x2)
- MIT ZERO Robotics "SPYSPHERES" ISS World Finalist

### **ACTIVITIES & EXPERIENCE**

## **LEAF Systems** | Co-Founder

(2017 - Present)

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

- MIT Sandbox Fall Cohort Admit
- Y Combinator Startup School Admit
- Arent Fox Pro Bono Patent Prize

## **Nuclear Fusion Physics Research**

(2016 - Present)

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

- Multiple-year physics research program working on project with assistance of NCSU and Duke
- Developed parallel computing algorithms for self-interacting electron plasma in low beta confinement
- Published in Broad Street Scientific, NCSEF Regional Winner, Yale Science Award

# FIRST Robotics | Team Founder and Director

(2014 - 2018)

Leadership position managing nearly 30 high school students to design, build, and program a 120lb, \$4,000+ robot on a World level.

- As Lead Director, managed Engineering, Business, and Outreach teams
  - Houston World Championship Award for Quality Design
- Guided team growth from 8 Students in garage to 29 students in leased 3300 sqft workshop
- Leading grant writing and corporate sponsorship efforts totaling over \$120k in 4 years

### NASA HUNCH (High schoolers United with NASA to Create Hardware)

(2016 - 2018)

Working with NASA Engineers to develop innovative solutions for real problems aboard the ISS

- Received \$2000 from NASA to develop working space-flight additive manufacturing prototype
- Delivered prototype and CAD to NASA Langley Research Center over 2017 Summer
- Led projects including Augmented Reality assistant and real-time inventory system

Conrad Challenge Alumni Leadership Council | Organization Development Lead (2018 - Present) Foundation leadership position building corporate and university partnerships for the Conrad Challenge

- Founded university partnerships with Olin College of Engineering and Florida International University
- Founding Olin Summer Incubator for Olin and Conrad Challenge Students
- Started Conrad Chapters to bring student entrepreneurship curriculum to high school students

# **NOTEABLES**

•	Summer position managing CAM and job quoting for Barbour Machine Inc.	(Summer 2018)
•	NCSSM Engineering Research and Shop Manager	(2017 - 2018)
•	Olin Electric Motorsports Electronic Design	(2018 - Present)
•	International Aerial Robotics Competition (IARC)	(2018 - Present)