# Tiger Sky Jewell-Alibhai



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# **Skills**

## **Programming:**

HTML, CSS, Bootstrap MATLAB, ROS, Gazebo Java, Kotlin Github, Git, Javascript Python (LinkedIn cert)

#### **Power Tools:**

Advanced Wood Tools 3D Printer, Laser Cutter Vinyl Cutter Mill, Shopbot CNC Soldering

#### Software:

SolidWorks, Onshape Fusion 360, GrabCAD SimScale FEA/CFD Photoshop, Illustrator Office, Jetbrains Suite Wix, Wordpress STK (L1 Certified) Design Expert 13

## Languages:

Mandarin, Portuguese

## Other:

Management, Leadership Web and Graphic Design Video and Movie Editing Licensed Drone Pilot (107)



tigeysky.com

Robotics Engineer, maker, and creator with experience designing, building, and flying UAVs. Looking for positions in robotics and aerospace engineering.

# Education

# Olin College of Engineering Needham MA

Aug 2019 - May 2023

- Bachelor of Science in Engineering, Concentration Robotics.
- Recipient of 4-year, 50% Franklin W. Olin College Merit Scholarship
- Courses in Mechanical Engineering, ECE, Programming, Lean-Agile Project Design, Applied Linear Algebra and Multivar Calculus, Software Design, ODEs and Dynamic Systems, and Mechanical Solids and Structures.
- Current cumulative GPA is 3.96

## **Durham Academy HS** Durham NC

Aug 2015 - May 2019

- Received Cole Award for Excellence in Physical Sciences (10th grade)
- Received Senior Science Award

# **Experiences**

## Olin Satellite Group - Mechanical Engineer

May 2021 - Aug 2021

- Designed structural components in Solidworks for cross-university small satellite project involving the launch of three 3U satellites to collect atmospheric oxygen readings and demonstrate formation flying behaviour.
- Oversaw systems integration and prepared designs for manufacturing.

## Practical Scientific Solutions - Mechanical Engineering Intern May 2020 - Aug 2020

- Iterated from prototype to final production design of ruggedized light emitting box.
- Designed a UAV protection system in Solidworks involving landing gear and prop guards.
- Lead and completed research projects into the use of radio and inertial tracking systems and the cost, technical, and logistical aspects of launching a cubesat.

### Wildlife Monitoring - UAV Consultant and Pilot

2017 - 2019

- Monitored endangered wildlife using UAVs to ID animals from their footprints over several projects in Namibia, China, Portugal, and the US.
- Operated in tough conditions and advised researchers on specifications of UAVs to gain more effective data.
- Collaborated with Parrot Sensefly (UAV company).

# **Geophysics Project - Researcher and UAV Pilot**

May 2018 - Jun 2018

- Involved in research project to map several areas of land in eastern Oregon.
- Upgraded DJI M600 with Micasense RedEdge multispectral camera and Zenmuse XT.
- Used Pix4D photogrammetry software to generate accurate maps of areas of interest.
- Gained experience with ground based Magnetometers and EM devices.

# **Projects and Activities**

## Olin Design Build Fly Team - Project Manager

2019 - Present

- Project manager and former structures lead on Olin's AIAA Design Build Fly Project Team.
- Designing, testing, and flying of R/C planes for specific competitions.
- Experience with structural, electrical, and systems aspects.

## UAV Design, Racing, and Cinematography

2015 - Present

- UAV Hobbyist with experience in all aspects of designing, budgeting, building, and flying multirotor and fixed wing UAVs.
- Various UAV cinematography jobs, participated in the 2020 MultiGP Sport Class Championship.

#### 1/3 Scale Mini FRC Robot

Dec 2020 - Feb 2021

• Designed and built modular 3D printed robot with holonomic drive to compete in a ½ scale version of the First Robotics Competition.