Tiger Sky Jewell-Alibhai

Email: talibhai@olin.edu

Phone: (919) 432-3068

Website: tigeysky.com

Skills

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

Tools/Manufacturing:
Advanced Wood Tools
3D Printer, Laser Cutter
Vinyl Cutter
Mill, Shopbot CNC
Soldering
Composites techniques

Software:
SolidWorks, Onshape
Fusion 360, GrabCAD
SimScale FEA/CFD
Mission Planner/QGC
Ardupilot, Crazyflie
STK (L1 Certified)
Design Expert 13

Languages:
Mandarin, Portuguese

Other:
Web and Graphic Design
Video and Movie Editing
Licensed Drone Pilot (107)
AMA Member

tigeysky.com

Robotics Engineer, maker, and creator with experience designing, building, and flying UAVs. Looking for positions in mechanical, 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 Multivariable Calculus, Software Design, ODEs and Dynamic Systems, Mechanical Solids and Structures, and Mechanical and Aerospace Systems.
- 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

Ascent Aerosystems - Mechanical Engineer ***May 2022 - Aug 2022***

- Designed and integrated an LTE control and video link into a prototype coaxial UAV.
- Design, integration, and documentation for manufacturing of UAV rotor assemblies and camera mounts.
- R&D flight testing and monitoring of coaxial UAVs.
- Maintenance of markforged and prusa 3D printers.

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.

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 - 2022***

- 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.
- Lead the team to place 15th of over 100 teams at the AIAA DBF competition.

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.
- Ongoing project to design < 250g tube launch folding wing RC powered gliders.