ANDI ZHOU

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An aspiring 3rd year aerospace engineering student with extensive interests in structures and fluid flows and is skilled in a variety of hands-on tools and simulation softwares.

EDUCATION

UNIVERSITY OF MICHIGAN — Ann Arbor, MI

Undergraduate Aerospace Engineering / 3rd Year – Sept 2018 to present

- Overall GPA: 3.65, Major GPA: 3.86
- Dean's honor list

RELEVANT SKILLS

- Cross-team organization and communication
- Strong familiarity with basic hand tools
- Team leadership and management
- Punctual and time conscious
- Pressure and stress handling
- Self-motivated and independent

EXPERIENCE

MICHIGAN AERONAUTICAL SCIENCE ASSOCIATION — Ann Arbor, MI

Coordinating the design, simulation, manufacturing, and integration of the fin aerostructure on the Tangerine Space Machine, an amateur rocket that aims to be the first student-build liquid engine vehicle to reach space

Fin Lead, 2018 – present

- Volunteered to lead the design, simulation, and manufacturing of the fins for the Tangerine Space Machine
- Leading a team of 4 with minimal guidance, successfully designed a manufacturable fin assembly that met all design criteria and engineering constraints
- Coordinated with Out-of-House manufacturing companies for fabrication of complex components; ensured manufacturing deadlines were promptly met
- Managed to finalize design, push out drawings and manufacture all major fin components within only a six-week lead time
- Communicated in team technical meetings issues regarding overall system engineering and design, such as reducing fin surface area to re-adjust component mass and rocket stability parameter

Assembly, Test, Launch and Operation Engineer, 2019 – 2020

- Participated in assembly and testing of PT-163, an experimental liquid bi-propellent engine that broke the collegiate thrust record on February 22nd, 2020
- Assisted in engine plumbing work, can utilize a tube cutter and bender to obtain the desired tubular shape
- Comfortable in using both basic and advanced hand-tools, such as a drill, torque-wrench, and Dremel for component assembly and testing purposes
- Fully understand the working theory of bolts, able to conduct bolting calculations to determine the suitable amount of bolt pre-load without causing excessive tensile/shear stress
- Proficient in using basic electronic instruments such as a hand-held/digital multimeter and an oscilloscope to troubleshoot faulty circuits

CERTIFICATE

PRIVATE PILOT LICENSE (PPL)