Maxwell Frampton

(801) 903-3045 | max@maxframpton.com | www.linkedin.com/in/maxwelldframpton

EDUCATION:

The University of Alabama
Tuscaloosa, Alabama
Bachelor of Science in Aerospace Engineering **May 2023**
Undergraduate GPA: 3.5/4.0 Honors: Cum Laude

SKILLS:

Foreign Languages: Fluent in speaking, reading, and writing in Spanish
Technical Skills: Adobe InDesign, Illustrator, DreamWeaver, Microsoft Excel, SolidWorks, Fusion 360, Additive Manufacturing, Wolfram Mathematica, Patran, Nastran
Programming Languages: C++, Python, SQL, MATLAB, Wolfram Language, HTML, CSS
Scripting Languages: Bash, Zsh
Version Control: Git

WORK EXPERIENCE:

Aerospace Engineer, **United States Air Force,** Hill AFB, Utah **Aug 2023– Present**

- Designed and developed quadcopter and other drones in a non-classified environment
- Write software drivers in Python and C++ to integrate a 360-degree LiDAR scanner with a flight controller
- Write a Simultaneous Localization and Mapping (SLAM) algorithm to process point-cloud data using machine learning (ML)

PROJECT WORK:

Senior Project Team CFO, **Team Icarus, The University of Alabama,** **Aug 2022 – May 2023**
Tuscaloosa, Alabama

- Designed, modeled, and fabricated a prototype thermal control system for use in a CubeSat satellite
- Prepared and adhered to a budget for all expenses related to the execution of the project
- Created and maintained a Master Equipment List (MEL) containing information for each component of the system, including part number, safety information, and itemized budget statement
- Prepared and submitted purchase order request forms, working closely with University employees
- Communicated with individuals in various University departments professionally and courteously

Liquid-fueled Rocket Development Team, **Alabama Rocketry Association**, **Aug 2021 – May 2022**
Tuscaloosa, Alabama

- Formed a manufacturing sub-team with two other students, focusing on a stainless-steel engine case and a 3D-printed motor housing for stepper motors
- Designed and manufactured components of a liquid-fueled rocket engine and motor housing, including making technical drawings, with SolidWorks

UNDERGRADUATE RESEARCH EXPERIENCE:

Research Assistant, **Computational Imaging and Smart Structures Lab,** **Oct 2021 – Dec 2022**
Tuscaloosa, Alabama

- Devised and implemented cutting-edge ultrasonic imaging methods for structures, with applications in nondestructive testing
- Wrote and executed MATLAB scripts to analyze, verify, interpret, and visualize experimental data
- Contributed to a data-processing pipeline which allowed graduate researchers to perform data analysis more efficiently

VOLUNTEER EXPERIENCE:

Volunteer General Secretary, **El Salvador West/Belize Mission,** El Salvador **Nov 2018 – Jun 2019**

- Managed inventory and distributed supplies throughout El Salvador and Belize
- Created a weekly newsletter with Adobe InDesign to disseminate information throughout organization
- Oversaw training of 10-25 volunteers in various positions of leadership, developed and exercised leadership, teamwork, and communication skills