

Alexander Wolfgang Hoppe

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Summary

- Mechanical engineering student with a passion for robotics and electro-mechanical design seeking to become an Engineering Intern.

Education

Embry-Riddle Aeronautical University, Prescott AZ Fall 2017 – Spring 2022

- Bachelor of Science in Mechanical Engineering, Robotics track
- Minor in Computer Science
- 3.97 / 4.00 GPA

Highline College, Des Moines WA Fall 2015 – Spring 2017

- Associate of the Arts with Emphasis in Mathematics
- 3.82 / 4.00 GPA, graduated with honors

Experience

Lead Integrator, ERAU EagleSat Program Fall 2017 – Present

- Coordinated efforts within the EagleSat team and with external partners to ensure timely integration of subsystems and compliance with launch provider requirements.
- Selected as a NASA Space Grant Scholar for work developing CubeSat hardware.

Research Assistant, ERAU College of Engineering Fall 2020 – Present

- Contributed to professor lead research into glare detection and mitigation with the goal of improving manned vehicle safety.

Teacher's Assistant (MatLab / CAD), ERAU Spring 2019 – Winter 2020

- Tutored students in MatLab and Computer Aided Design during class periods and graded assignments to help students identify areas in need of improvement.

Mechanical Engineer Intern, Loon Spring 2020 – Fall 2020

- Developed mechanical components and assemblies for stratospheric balloons to expand connectivity in underserved communities.
- Designed custom test fixtures to provide greater insight into temperature dependent material properties and increase simulation fidelity.

Mechanical Engineer Co-Op, General Dynamics Mission Systems Spring 2019 – Winter 2019

- Developed electromechanical systems that operate in challenging environments while working in the Undersea and Telecom Systems division.
- Operated a 3D printing lab while gaining extensive experience managing and maintaining FDM printers.

Skills

CAD / Fabrication

- Solidworks
- Autodesk Inventor
- 3D Printing
- Waterjet / Laser Cutting

Simulation / FEA

- SolidWorks Simulation
- ANSYS Workbench

Programming / Software

- MATLAB
- C, C++, & Python
- Microsoft Word, Excel, Powerpoint
- HTML / CSS

Honors

- TBII, ΦΚΦ Honor Society Member
- ERAU Presidential Scholarship
- CoE Dean's List (all semesters)
- 2019 NASA Space Grant Scholar