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
- 3.96 / 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 LSP 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 reasurch into glare detection and midigation to improve manned vehical safety.

Teacher's Assistant (MatLab/CAD), *ERAU College of Engineering*   Spring 2019 – Present
- 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 – Fall 2020
- Designed 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 – Winter 2019
- Developed electromechanical systems that operate in challenging environments while working in the Undersea and Telecom Systems division.
- Ran a 3D printing lab while gaining extensive experience operating 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

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