

# Alexander Wolfgang Hoppe

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hoppe.space

## 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 research into glare detection and mitigation to improve manned vehicle 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