Alexander Wolfgang Hoppe

e. alex@hoppe.space   w. hoppe.space

Summary

Mechanical engineering student with a passion for robotics and electro-mechanical design seeking an entry level mechanical / robotics engineering position.

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
- AA with Emphasis in Mathematics
- 3.82 / 4.00 GPA, graduated with honors

Experience

Mechanical Engineer Intern, *DEKA Research & Development*   Spring 2021 – Fall 2021
- Assisted in the development and implemented micro manufacturing systems for distributed pharmaceutical manufacturing.
- Wrote test procedures and created test fixtures to ensure product compliance.

Mechanical Engineer Intern, *Loon (Alphabet)*   Spring 2020 – 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 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.

Deputy Project Manager, *ERAU EagleSat Program*   Fall 2017 – Present
- Coordinated integration efforts within the EagleSat team and compliance with launch provider requirements as a NASA Space Grant Scholar.

Research Assistant, *ERAU College of Engineering*   Fall 2020 – Present
- Contributed to professor lead research into glare detection and mitigation.

Teacher's Assistant, *ERAU College of Engineering*   Spring 2019 – Present
- Tutored students and graded assignments for MatLab, CAD, and robotics classes.

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

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