

Alexander Wolfgang Hoppe

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Summary

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

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 implementation of 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.

Project Engineer, ERAU CubeSat 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 / Simulink
- 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