Alexander Wolfgang Hoppe

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Purpose
- Seeking to become a Mechanical Engineering Intern.

Education

Embry-Riddle Aeronautical University, *Prescott AZ*   fall 2017 – spring 2021
- Bachelor of Science in Mechanical Engineering (robotics)
- Minor - Computer Science
- 3.9 GPA

Highline College, *Des Moines WA*   fall 2015 – spring 2017
- Associate of the Arts - Emphasis in Mathematics
- 3.82 GPA, graduated with honors and Honors Scholar Program participant

Skills

Leadership/Project Management
- Served many Leadership roles including *Structures System Lead* (EagleSat II), *System Manager* (Washington Aerospace Scholars), *Chairman's Presenter* (FIRST Robotics)

Computer-Aided Design
- Skilled in the CAD programs *Solidworks* and *Autodesk Inventor*
- Experience: EagleSat II, Honors in Engineering Design at Highline College, FIRST team 3574, and numerous personal projects from quadcopters to small robots

Programming/Software
- Experience with *Thermal Desktop* and *SolidWorks Simulation*
- Adept in *MATLAB, C, C++,* and *HTML5/CSS* with experience in *Java* and *Python*
- Microsoft *Word*, *Excel*, *PowerPoint*, and *Publisher* and Google equivalents

HAM Radio
- FCC certified amateur radio technician. Callsign: KG7YRP

Experience

Structures System Lead, *EagleSat II / NASA Space Grant*   fall 2017 – present
- Responsible for the design, testing, and fabrication of EagleSat II's CubeSat structure hardware and thermal control capabilities.
- Manage team efforts and resources in conjunction with NASA's CubeSat directives.
- Selected as a NASA Arizona Space Grant Scholar for my work on Structural Design and Analysis through a competitive, merit-based application process.

Summer Programs Coordinator, *ERAU Summer Programs*   summer 2018
- Represented Embry-Riddle while leading ERAU summer program attendees in activities around campus and providing support to externally contracted groups.

Renaissance Student, *FIRST Robotics Team 3574*   fall 2014 – summer 2017
- Used CAD to design, fabricate, and assemble systems on roughly 150 lb. robots.
- Wrote and tested much of the code for autonomous and teleoperated operation of said robots and taught new students how to program in Java and Python.
- Represented the team as a presenter for the prestigious Chairman's award.

System Manager, *Washington Aerospace Scholars*   fall 2015 – summer 2016
- Led a team of high school students in the creation and presentation on a possible manned mission to Mars for distinguished engineers and scientists.

Student Mentor, *FIRST Lego League Team 17715*   fall 2015 – spring 2016
- Mentored a group of young students (age 10 - 16) on the fundamentals of robotic design/programming and introduced them to the STEAM field.