

COLIN WAGNER

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PROFILE

I am a 2022 graduate of The Ohio State University with a B.S. in Aerospace Engineering and a Design Thinking minor. I am searching for an aerospace or mechanical engineering related full-time opportunity where I can learn and lead, as well as feed my curiosity and passion for problem solving and design - utilizing the technical knowledge and communication skills that I've acquired through my extracurricular and academic careers.

EDUCATION

Ohio State University - Columbus, OH

Expected Graduation: May 2022

Bachelor of Science: Aeronautical and Astronautical Engineering

- Minor in Design Thinking
- 3.5 cumulative GPA

PROJECTS

Personal Electric Aircraft / Design of Atmospheric Flight Vehicles

September 2021 – April 2022

- Team of 5 students tasked with designing a personal electric aircraft with various design requirements
- Consisted of a concept design phase (AU21) and a preliminary design phase (SP22)
- Performance parameters were constantly refined as more detailed geometry and systems were decided upon
- Real world, in-depth application of aerospace concepts to solve a complex problem

Counter-Flow Air-to-Air Heat Exchanger / Experimental Projects (Capstone)

September 2021 – April 2022

- Research capstone project focused on exploring the ways in which a heat exchanger can be designed to maximize efficiency and maintain a low air mass flow rate
- Team of 5 students with a faculty advisor, tasked with designing an adequate experiment from scratch (\$600 budget) and completing a computational component to further explore the project

Student Wellness Project / Exploring Design Thinking

October - November 2020

- Group of 4, tasked with designing a solution to improve the general wellness of students during pandemic
- Utilized the design process: conducting surveys, defining our problem, ideating solutions, prototyping, and developing a final product concept
- Presented our final idea, a (improved) wellness app with more student accessible features

1-D Rocket Simulation / Intro to Aero. II

April 2020

- Group of 3 students created a physics-based model to simulate a vertically launched/traveling rocket
- MATLAB was used to execute this simulation, accounting for variance in thrust and mass

ORGANIZATIONS

- Empower Mentoring

2020 - Present

- **Operations Chair:** Head of scheduling, communicates with teachers and mentors, handle logistics

- American Institute of Aeronautics and Astronautics (AIAA)

2019 - Present

- Buckeye Space Launch Initiative

2019 - 2020

- Aerodynamics sub-team member (CFD, work with SolidWorks & ANSYS Fluent)

SKILLS

- Leadership

- Organization

- MATLAB / Simulink

- Teamwork

- Communication

- XFLR5 / OpenVSP

- Problem Solving

- Autodesk Inventor / SolidWorks / OnShape

- ANSYS (Fluent, FEM)

EXPERIENCE

Student Grader / OSU Department of Mechanical and Aerospace Engineering

August 2021 – December 2021

- Grader for Introduction to Aerodynamics (AE 3560), scoring of students' course assignments
- Average 10 hours of work per week
- Required communication with students and instructor, as well as time management skills to manage own courses
- Reinforced fundamental concepts of aerodynamics (stream-functions, thin airfoil theory, etc.)