MARK J. WAGNER

5695 Cedar Creek Vw, #203, Colorado Springs, CO 80195 | markwag99@gmail.com | (904) 521-5981

EDUCATION

Bachelor of Science in Aerospace Engineering | University of Florida | GPA: 3.60 May 2021

- Minor in Computer and Information Science and Engineering
- Relevant Coursework: Aerodynamics, Aerospace Senior Design, Aerospace Structures, Aircraft Stability and Control, Data Structures, Design and Manufacturing Laboratory, FEA, Thermodynamics, Operating Systems

WORK EXPERIENCE

Project Engineer | Thin Metal Parts November 2021 - Present

- Analyze and resolve manufacturing issues, such as part failures, process inefficiencies, and subcontractor issues
- Lead multiple projects to improve manufacturing processes, increase throughput and capability
- Manage projects and personnel in the forming department, including tooling and part design using CAD tools
- Collaborate with other engineers to design and develop large-scale projects, including new manufacturing lines

Design and Manufacturing Lab Teaching Assistant | University of Florida August 2019 - May 2021

- Instruct over 30 students to safely operate manual and CNC milling machines, lathes, and other equipment
- Provide technical feedback and grading on various robot design concepts, design reports in formal reviews
- Mentor new teaching assistants in machine operation, design for manufacturability, and leadership skills

Undergraduate Researcher | University of Florida November 2020 - May 2021

- Research for the Non-Traditional Manufacturing Laboratory, part of the Additive Manufacturing team
- Responsible for data collection, progress reports, and research summaries on independent research project

PROJECTS

Non-Traditional Manufacturing Lab Research Machine | Research Project

- Investigate surface finishing of an additively manufactured workpiece with complex geometry
- Responsible for design and manufacture of machine for needed for project, including full CAD generation
- Programmed and validated configurable motor control system using Python scripts run on Raspberry Pi

AIAA Undergraduate Design Competition | Team Project | github.com/MarkWagner99/Sabretooth

- Proposed a new austere field light attack aircraft to satisfy requirements in 2021 AIAA Request for Proposal
- Completed full analysis of aircraft structure, propulsion system, and flight performance

Design and Manufacturing Lab Robot | Team Project | github.com/MarkWagner99/DML-Robot

- Iterative design process which taught design for manufacturability, group collaboration, and systems design

SKILLS & ACHIEVEMENTS

- Software Skills: SolidWorks, MATLAB, Fusion 360, FEA tools, Python, and Microsoft Office suite
- Quality analysis and control experience working to fix nonconformances, improve manufacturing accuracy
- Design experience with a focus on design for manufacturability and assembly, including GD&T experience
- Experience with data acquisition and analysis, including research labs, quality control, and metrology data analysis
- Excellent technical communication and leadership skills working with cross-disciplinary teams and technicians

INVOLVEMENT

Member | Sigma Gamma Tau Aerospace Honor Society | February 2021 to May 2021

Member | University of Florida Habitat for Humanity | September 2019 to May 2021