IAN P. MORGAN

Medina, Ohio 44256 | 330-636-6938 | ian.morgan1014@gmail.com | www.linkedin.com/in/ian-morgan5

EDUCATION

Vanderbilt University – B.E. Mechanical Engineering

May 2025

June 2023 – Present

June – Aug. 2020

Sep. – Dec. 2022

Sep. 2021 – May 2022

- Cumulative GPA: 3.9/4.0 Dean's List all semesters
- Minors: Engineering Management and Piano Performance

SKILLS

- Software: SolidWorks (CSWA Certified), Siemens NX, Cameo, DOORS, MATLAB, Java, Jira, MS Office
- Other: Requirements Management, MBSE, Agile, Project Management, Technical Writing, Spanish

WORK EXPERIENCE

Lockheed Martin Corporation | Systems Engineering Intern

- Develop model repository for Oasis A2 program as lead engineer using Cameo Systems Modeler, spearheading the program's digital transformation and providing a resource for current/future team members
- Present product demo of model repo to colleagues and management, leading to wider adoption of MBSE
- Generate requirements for software simulation products using Rational DOORS to inform developers
- NASA Glenn Research Center | Mechanical Engineering Intern
 June Aug. 2022
 - Contributed to the design of a new condensation test module for the Flow Boiling and Condensation Experiment (FBCE), collaborating with other engineers and scientists in a multidisciplinary team
 - Improved hardware design through implementation of design additions and modifications in SolidWorks
 - Advanced Center Innovation Fund (CIF) proposal by creating 3D CAD models and 2D engineering drawings of new components and assemblies, directly furthering efforts to procure funding for the project

NASA Glenn Research Center | Engineering Intern

- Created engineering drawing trees using Visio and drafted the drawing tree document for FBCE
- Reviewed engineering drawings of hardware components to illustrate system architecture for peer use

PROJECT EXPERIENCE

Vanderbilt Aerospace Design Laboratory | Mechanical EngineerMay 2023 – Present

- Compete in the NASA Student Launch Initiative as member of 7x national champion rocket team
- Cultivate novel payload and systems over entire engineering lifecycle, from design to fabrication and test
 Vanderbilt Satellite Club | President Sep. 2021 May 2023
 - Lead design of payload and structures for high-altitude balloon projects, achieving 100% success rate
 - Develop project timelines, coordinating design, build, and test tasks among sub-teams
 - Manage requirements, from component to system level, to ensure mission success
 - Inspire enthusiasm for space exploration through campus and outreach events, increasing club reach

L'SPACE Mission Concept Academy | Project Manager

- Guided interdisciplinary team through fast-paced, 12-week mission design project, earning high marks for delivery of PDR for orbiting spacecraft tasked with determining mass, density, and composition of a NEO
- Oversaw trade studies, design choices, and component selections to optimize system architecture
- Managed budget and schedule, balancing design and operational excellence for effective mission plan

Vanderbilt Robotics | Frame and Drive Member

- Conducted CAD modeling of frame and drive subsystem of robot in NASA's Lunabotics Competition
- Fabricated components using mills, lathes, and other equipment to prepare robot for integration and test

AWARDS AND DISTINCTIONS

- Lockheed Martin STEM Scholar, May 2021 Present
- National Merit Finalist and Scholar, February 2021 Present

INTERESTS

- Piano performance, have played at Carnegie Hall twice as a winner of multiple international competitions
- A cappella, snowboarding, classical music, paddleboarding, roller coasters