

Brennan Drake

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Education

Bachelor of Science in Mechanical Engineering

Minor in Management

Georgia Southern University, Statesboro, GA, May 2023 **GPA: 4.0**

Relevant Experience

Gulfstream Aerospace – Additive Manufacturing Lab Co-op – Innovation Engineering and Flight Division (Summer 2022)

- Operated various additive manufacturing technologies such as SLA, FDM, and Polyjet machines in order to assist in the production of shop aids and prototypes for use around the organization. In doing so, sought to make improvements to productivity and quality of the lab

Georgia Southern University - Research into RFID Landmarking in SLAM Applications (Spring 2022-Present)

- Began research into the efficacy of utilizing RFID tags as landmarks for simultaneous localization and mapping of autonomous planogram compliance robotics using ROS2 control architecture
- Codebase in Python and C++ with general operation utilizing Ubuntu Linux Distributions

Gulfstream Aerospace – Systems Safety Co-op – Innovation Engineering and Flight Division (Fall 2021)

- Working as a Systems Safety Engineer, I drafted multiple documents such as System Safety Assessments, Functional Hazard Assessments, Fault Tree Analysis, and others in pursuit of design compliance to FAA and EASA guidelines

Heatcraft / Lennox International - Manufacturing Intern (Spring 2021)

- Managed various projects from formulation to execution ranging from material fixtures, transportation solutions, and quality-centric improvements around the manufacturing plant.
- Hands-on experience prototyping and working with Tool and Die department for fabrication in-house

Skills

- CAD Design Proficiency
 - CSWA Certified in Solidworks
 - Proven experience using Solidworks, Inventor, Onshape, Solidedge, Catia, and AutoCAD
- Python Proficiency and Usage in ROS2 Package Development for Autonomous Robot Control Algorithms
- Skilled in designing for additive manufacturing and operation / maintenance of additive manufacturing technologies
- Proficiency using IBM DOORS, Subversion, and Catia for verification and validation efforts
- Experienced in using machining tools, hand tools, soldering, and PCB design
- Seasoned at managing teams for academic pursuits, volunteer opportunities, and research projects
- Proficient in Microsoft Word, PowerPoint, Excel, and Outlook

Volunteer Experience

Epsilon Tau Pi Community Service

- Serving as Service Coordinator (January 2020 – December 2020)

Honors Student Organization

- Serving as Volunteer Coordinator (March 2020 – December 2020)

Activities & Accomplishments

- President's List Georgia Southern University **Fall 2018 - Present**
- Georgia Southern U.S. Quidditch Team **Fall 2018 – Fall 2020**
- Georgia Southern Honors Program **Fall 2018 – Present**
- Spark Innovation Competition 1st Place Team member **Fall 2019**
- Study Abroad Opportunity in Craiova Romania **Summer 2019**
- Member of Epsilon Tau Pi the Eagle Scout Service Fraternity **Spring 2019 – Present**
- Hobby Design, manufacturing, processing, and prototyping of 3d printed parts and electromechanical assemblies.
- Eagle Scout in The Boy Scouts of America
 - Managed Eagle Project spanning 8 months, 12 workdays, around 20 volunteers, and thousands of dollars worth of materials in order to reconstruct and renovate an elementary school outdoor classroom.