DYLAN BRYANT

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EDUCATION

The University of Tennessee, Knoxville, Tickle College of Engineering Bachelor of Science in Mechanical Engineering Major: *Mechanical Engineering* Minor: Aerospace Engineering

The University of Tennessee, Knoxville, Tickle College of Engineering Master of Science in Mechanical Engineering Major: *Mechanical Engineering* Concentration: *Advanced Manufacturing*

PROFESSIONAL EXPERIENCE

Fiber and Composites Manufacturing Facility

Graduate Research Assistant

Research Area: Materials Maturation for High Mach Systems

- Research focused on developing a stable manufacturing and characterization methods for low-cost carbon fiber in carbon/carbon composite materials
- Handled Controlled Unclassified Information in accordance with federal regulations
- Organized and led a team of 3-5 undergraduate students performing laboratory testing
- Supported 3-4 laboratory tours and community outreach events per month

Keurig Dr. Pepper

Engineering Intern

- Used RCFA and DMAIC processes to identify and resolve production line performance issues
- Engineered easily deployable resolutions to safety issues in collaboration with EHSS team
- Designed and modeled production line fixes using SOLIDWORKS
- Drafted detail drawings for new and revised models to facilitate machine shop interaction
- Digitally replicated and 3D printed components for temporary machine fixes

Pactiv Evergreen

Engineering Intern

- Revised drive maps for paper & board machines and roll finishing areas
- Created catalog of RPM, HP, and coupling model numbers for approximately 600 electric motors
- Modeled and installed components for conveyor systems using AutoCAD
- Performed on-site troubleshooting and emergency repairs on critical machines with maintenance team

LEADERSHIP

Blount Country Robotics, FIRST Robotics Team 4504

Mentor

- Instructed and monitored team of approximately 30 middle to high school students
- Implemented and enforced the use of project management techniques
- Evaluate technical designs pitched by students before implementation
- Participated in conflict resolution between students with lead mentor

RELEVANT PROJECTS

AIAA Design Build Fly Team, The University of Tennessee, Knoxville Structures and Manufacturing Team Lead Awarded "Best Aerospace Engineering Senior Design Project"

• Led weekly team meetings with chief engineer and faculty advisor

Knoxville, Tennessee August 2022 - May 2023

Canton, North Carolina

May 2022 - August 2022

Maryville, Tennessee December 2021 - Present

Knoxville, Tennessee August 2023 – Present

Knoxville. Tennessee

May 2023 – December 2023

Knoxville. Tennessee Graduation: May 2023

Knoxville, Tennessee Graduation: December 2024

- Designed models and assemblies in SOLIDWORKS during conceptual design phase
- Researched and implemented composite construction techniques using carbon and glass fiber weaves
- Edited and sliced models to create structural components using 3D printing
- Developed MATLAB code to optimize aircraft weight, power, dimensions, and carrying capacity to increase scoring potential
- Optimized component manufacturability, cost, and assembly complexity to meet project requirements
- Ensured prompt submission of well-formatted deliverables prior to set deadlines

SKILLS

Practical experience in SOLIDWORKS, MATLAB, composite manufacturing, additive manufacturing, tool design, and Microsoft Office suite Rudimentary knowledge of AutoCAD, Fusion 360, machining, and polymer chemistry

RELEVANT TRAINING

OSHA 10-Hour Certification	April 2018
SKF Bearing Basics and Installation Training	June 2022
Root Cause Failure Analysis Training	July 2022
Introduction to Change Management	August 2022
Introduction to Export Compliance (EAR/ITAR)	August 2023
Export Compliance When Using Technology in Research	August 2023