

Keely Blahauvietz

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EDUCATION

Duke University

B.S.E Mechanical Engineering
Certificate: Aerospace Engineering
GPA: 3.782/4.0

Dean's List: Spring 2022, Spring 2023, Spring 2024, Fall 2024 (Distinction)

Durham, NC
Aug. 2021 – May 2025

EXPERIENCE

R&D Mechanical Design Engineer

Stratasys Intern

May – August 2024
Eden Prairie, MN

- Used Arduino, SolidWorks, and 3D printing to develop an electromechanical PID control system for a filament dryer cabinet
- Created and iteratively improved a custom sheet metal tray, transitioning from 3D-printed prototypes to production-ready designs; collaborated with machinists and incorporated user feedback for manufacturability and functionality
- Improved product performance by creating parts using SolidWorks, EPDM, and GD&T, producing engineering drawings, contributing to BOMs, and conducting thorough testing
- Investigated and resolved production issues with printer rail assemblies, collaborating with cross-functional teams to identify root causes, propose solutions, and implement design or assembly line adjustments
- Researched, designed, and prototyped a monitoring system, including rebuilding a robust CAD assembly, creating parts with SolidWorks, and testing prototypes in the lab

Quality Control Engineer/Manager

Engineers In Action

May – July 2023
Ngcoseni, Eswatini

- Led quality control for the construction of a 122.1-meter bridge in Ngcoseni, Eswatini, benefiting two rural communities
- Managed project timelines and ensured adherence to strict design, safety, and quality standards through collaboration with professional and student engineers
- Contributed to a project that underscored the transformative power of engineering in improving community infrastructure and well-being

PROJECTS

Solar Module Covering Design

Independent Study

Aug. 2024 – Present

- Researched, developed, and tested innovative solar module covering materials that integrated symbols and imagery with minimal energy loss
- Presented results at Duke Energy Week's Energizing Tomorrow: Innovation Showcase

Conceptual Design and Analysis of Supersonic Airfoils

Research Project

Spring 2023

- Utilized CAD and CFD skills to design and optimize symmetric double wedge airfoils, enhancing aerodynamic efficiency and minimizing drag for supersonic flight conditions

LEADERSHIP & ACTIVITIES

Team Captain and Student Athlete

Duke Dancing Devils

Aug. 2021 – Present

- Lead and manage a 30 member dance team, coordinating schedules, rehearsals, and events to ensure seamless operations and high-quality performances at Duke sports games
- Perform and spirit at Duke sports games year round, compete in national competition

Duke Aero

Structures Team Member

Aug. 2021 – 2023

- Designed and fabricated the nose cone for the team rocket using CAD software and lathe machining
- Learned about the aerospace industry, different components of rockets, and gained experience working on a design team

SKILLS & INTERESTS

Design: SolidWorks, FEA, CFD, Fusion 360, GD&T, 3D printing, Soldering, CNC milling, Lathe, EPDM, Onshape

Programming: Java, Arduino, MATLAB, LaTeX

Soft Skills: Multitasking, Collaboration, Problem-solving, Creativity, Self-motivation, Adaptability

Interests: Sustainability, Aerospace Engineering, Product Design, Process Improvement, Innovation, Dance, Golf