

# Evan Cathers

Degreed Mechanical Engineer (MSME) as of May 2022  
Proven record of reliability, commitment, and versatility  
Collaborative, detail-oriented team player

45 Main St, Apt 2  
Bar Harbor, ME 04609  
(423)765 7692  
Ecathers3210@gmail.com

## HIGHLIGHTS

- Strong background in mechanical/aerodynamic design, numerical modeling, and wind tunnel analysis
- 7+ years of proficiency in SolidWorks, Autodesk Inventor, AutoCAD
- 3+ years of experience conducting finite element analysis and computational fluid dynamics (ANSYS Mechanical, Fluent)
- Skilled verbal communicator with formal presentation and written report experience
- High level of technical curiosity in aerospace engineering field

## PROFESSIONAL EXPERIENCE

### **Georgia Southern University – Aerospace Research Program Mentor (NSF/DOD funded)**

May 2021 – August 2021

Coached several high-achieving undergraduate engineering students through topics in the aerospace industry

Led several design review meetings, aiding in the selection and modeling of 3 subsonic aircraft wings and corresponding winglet structures

Assisted with the completion of several fluid dynamic simulations, determining lift and drag generation

Guided experimental design and data analysis of wind tunnel testing, including sensor selection and characterization

### **Marvin Windows & Doors – R&D Engineering Co-op**

May 2017 – August 2018

Designed components to be 3D printed or injection molded for use as rapid prototypes, industrial fixtures, and end-use components

Managed as project lead for 6 R&D projects

Modified and submitted detailed drawings and bills of materials for 17 ECNs to be reviewed and released (in-house software)

Performed tolerance analysis on components of several product lines to ensure dimensional accuracy (Six Sigma approach)

Hosted monthly product performance audit tests and hosted resulting report outs with upper-level management

Communicated regularly with suppliers and vendors to coordinate new component designs and material selection

## EDUCATION

### **Tennessee Technological University**

*B.Sc. in Mechanical Engineering  
Focus on materials science  
May 2020*

**Georgia Southern University**  
*M.Sc. in Mechanical Engineering  
Research in aerospace field  
GPA 3.87 - May 2022*

## ACTIVITIES

**Senior Design Project in Conjunction with Air Force Research Lab**  
Tennessee Technological University  
2020

**Seismic Loading Research**  
Georgia Southern University  
(2021-2022)

## OTHER SKILLS

Microsoft Office suite  
MATLAB + Simulink  
MicroPython, C++  
Hand tools  
Fabrication equipment  
PLC Programming

## OTHER EMPLOYMENT

**Reclaimed Professional Refinishing Services**  
Preparation and Paint  
(2022)  
Richmond Hill, GA

**Academy Sports + Outdoors**  
Shipping Associate, Inventory  
(2018 – 2020)  
Cookeville, TN