# AMANDA NEWBURY

### **SUMMARY**

Electrical Engineering Student at the University at Buffalo with excellent mathematical and problem-solving skills. Motivated to learn and perform high quality work in both group and independent settings. Currently seeking a full-time role in electrical or systems engineering starting in Fall 2025, with an interest in digital circuit design and sustainability.

#### **EDUCATION**

### University at Buffalo, The State University of New York

Bachelor of Science, Electrical Engineering, May 2025

Bachelor of Arts, General Mathematics, May 2025

- 3.9 GPA
- **Honors College**
- Relevant Coursework: Circuit Analysis, Engineering Computations, STEM Communications, Digital Principles, Signals and Systems, Applied Probability, Electronic Devices & Circuits I and II, Applied Electromagnetics, Fundamentals of Energy Systems, Embedded Systems, Communications Systems

#### **WORK EXPERIENCE**

GlobalFoundries - Essex Junction, VT

Yield and Characterization Engineering Intern | May 2024 - August 2024

- Used RStudio to develop an interactive wafer functional test feedback system for materials review board events
- Application generated PowerPoint summaries to improve team efficiency and use of resources and drive yield learning

Moog - East Aurora, NY

Electrical Design Engineering Intern | May 2023 – January 2024

- Performed circuit analysis using PSPICE and signal integrity tests using HyperLynx
- Prepared technical slides and documents for critical design reviews

University at Buffalo - Buffalo, NY

Engineering Principles Seminar Student Leader/Grader | August 2022 – Current

- Mentor freshman through completing an Engineering Recommendation Report and a Turbine/Boat Design Project
- Grade lab and lecture assignments weekly, providing useful feedback to help students develop technical writing skills

Moog - East Aurora, NY

Space and Defense Summer Employee | May 2022 - August 2022

- Modified Space Fluids Engineering Instructions for readability and accuracy
- Created engineering instructions for measuring instruments, oscilloscope operation, and critical surface finishes
- Developed a cleanroom production tracking system, including layout, contents, and location

### LEADERSHIP

#### Tau Beta Pi NY N - President

- Plan and host events to improve engagement and organization awareness, with a focus on increasing alumni involvement
- Serve as a liaison between the NY N Chapter and Nationals while conducting the chapter within current traditions
- Attend the 2024 national convention in Rapid City, SD along with the 2023 and 2024 regional conference in Binghamton, NY

### **SKILLS**

C/C++

HyperLynx

Microsoft Suite

**MATLAB** • **RStudio** 

**PSPICE** 

Multisim

**B-flat Clarinet** 

## **PROJECTS**

Frogger | Embedded Systems Course | April 2024 - May 2024

Implemented Frogger onto a ZyboZ7 development board and LCD display using Xilinx Vitis for C software programming

Renewable Natural Gas from Food Waste | National Fuel Gas | UB Engineering Intramurals | October 2022 – May 2023

Conducted a feasibility study on the implementation of an anaerobic digester on UB's campus

Wind Turbine | Engineering Principles Seminar | August 2021 – December 2021

Designed and optimized a turbine producing the maximum power as a group of four engineering students

## **HONORS AND AWARDS**

- Dean's List all semesters
- Turbine Design Award
- Pride of NY Scholarship

- Tau Beta Pi Engineering Honors Society
- Phi Beta Kappa Honors Society
- Tau Beta Pi Scholarship