# **Emma Wallace**

COMPUTER ENGINEER

Mobile: (434) 989-6977

Email: emmaw21@vt.edu

LinkedIn: www.linkedin.com/in/emma-wallace-22a2a1220

**Location:** Chester, MD

Motivated senior pursuing a degree in Computer Engineering, with minors in Mathematics and Popular Culture, actively seeking a summer internship or research position. Proficient in C/C++, Git, Verilog, and other technical tools, with hands-on experience in customer service, conflict resolution, financial management, and team collaboration. Strong interests in accessibility, machine learning, hardware development, and computer architecture, complemented by solid documentation skills and a passion for problem-solving.

## **Projects**

Sophomore Integrated Design Project

- Collaborated with a teammate to design and develop a wireless sensor node for temperature data collection, transmitting data to a mobile device via Bluetooth.
- Engineered the sensor node to operate independently from the power grid, utilizing solar energy (4-5V input) to charge a 9V rechargeable battery.
- Implemented power-saving functionality, ensuring the system enters low-power mode during idle periods to conserve energy and extend the lifespan of circuit components.

Toronto Met University Thrill Design Competition 2024

- Collaborated with a team to design a thrill ride based on the qualifying round prompt, contributing to the overall storyline layout for the ride, queue, and preshow experience.
- Collaborated with a team to design a solution for the accessibility/safety challenge of the competition.
- Led the design of accessibility features for both the queue/preshow and ride, focusing on inclusive guest experiences.
- Created concept art for the ride vehicle and platform, incorporating wheelchair accessibility.

## **Employment**

## February 2024 - Present

Treasurer @ Chi Omega Fraternity - Sigma Lambda Chapter

Blacksburg, VA

- Oversee budgeting, billing, reimbursements, and financial management for the chapter.
- Educate members on financial processes and best practices.
- Collaborate with the executive board to assist in overall chapter management and decisionmaking.

#### December 2023 - February 2024

Personnel Chair @ Chi Omega Fraternity - Sigma Lambda Chapter

Blacksburg, VA

- Supervised and enforced rules and policies, monitored judicial cases, and ensured adherence to fair and proper procedures.
- Promoted to Treasurer in February 2024 based on demonstrated leadership and responsibility.

#### Education

2025 - Bachelor of Science

**Computer Engineering** 

Virgina Tech, Virgina

Mathematics, Popular Culture

Minor

3.13/4.0

**GPA** 

Richard H. Warren ECE Scholarship

Fall 2022 - Spring 2023

#### **Skills**

Assembly

Verilog

C

C++

**MATLAB** 

Python

R

LaTeX

Visual Studio

**GIT** 

Code Composer Studio

Quartus

LTSpice

QTSpim

## **Relevant Coursework**

**Embedded Systems** 

Digital Design I

Integrated Design Project

Principles of Computer Architecture

Data Structures and Algorithms

Digital Image Processing