Anthony Martini

anthonycm2022@gmail.com | (513) 378-5774 | linkedin.com/in/anthony-martini | anthonymartini.github.io

Education

University of South Florida, Bellini College of AI, Cybersecurity, and Computing *May 2026*

B.S. in Computer Engineering, Minor in Mathematics, Honors College *GPA: 4.0/4.0*

Relevant Coursework: Natural Language Processing, Deep Reinforcement Learning, Hardware Accelerators for Machine Learning, AI and Analytics for Organizations, Analysis of Algorithms, Differential Equations, CMOS-VLSI Design, Graph Theory.

Work Experience

Procter & Gamble | *Software Engineering Intern* *May 2025 – August 2025*

- Designed and deployed a real-time collaboration service using WebSockets for an internal application, enabling user presence indicators, cell-locking, and live updates, preventing spending conflicts costing thousands.
- Enhanced an existing commenting system by implementing user tagging functionality, enabling user search, email notifications, and direct links to tagged content, saving time in communication and site navigation.

Procter & Gamble | *Software Engineering Intern* *May 2024 – August 2024*

- Built a documentation platform to showcase examples of 25 components in an internal React component library.
- Implemented Playwright tests into GitHub CI/CD pipeline to verify component functionality and accessibility on new releases, eliminating over 40 accessibility errors from the library.
- Patched issues and standardized design for a set of components in the internal library, addressing 15 issue tickets.

Intertape Polymer Group | *Power Platform Developer (Part-Time)* *November 2023 – Present*

- Designed, developed, and maintained 7+ production Power Apps and Power Automate workflows to automate core business processes, integrating Dataverse and SQL data sources, saving 400+ hours annually.
- Communicated with business owners to gather requirements and translate needs into maintainable Power Platform solutions.

Procter & Gamble | *Software Engineering Intern* *May 2023 – August 2023*

- Developed a Python-based automation using Selenium to extract, transform, and organize invoice data, reducing manual processing by 90+ hours annually.
- Managed and developed new and existing projects in the Microsoft Power Platform, automating the submission and approval of eCommerce requests, saving 300 hours annually.

Projects

Pneumonia Detection Using CNNs

- Architected CNN models with multiple convolutional layers, max-pooling layers, ReLU activations, and fully connected layers to detect pneumonia in pediatric chest X-rays, achieving ~91% accuracy.
- Optimized CNN models for GPU and CPU environments by leveraging different convolutional architectures, batch normalization, dropout, and pre-extracted features to ensure reliable and fast model performance on low-resource systems.

Performance Analysis of RoBERTa in Detecting Sexism

- Conducted a comparative performance analysis of sexism detection models by fine-tuning a RoBERTa model for binary text classification, achieving 87% accuracy, outperforming trigram, TF-IDF/vectorized, and CNN baselines on online comment data.

Next Step Tracker

- Collaborated with a team of students to create a Personal Health Dashboard that allows users to log and visualize health metrics such as exercise, sleep, and diet, promoting healthier habits and personalized wellness tracking.
- As part of the project requirements, built the application using only React and AWS Free Tier tools (Lambda, API Gateway, Amplify), delivering a cost-effective and scalable solution within a single semester.

FPGA Audio Controller

- Engineered an FPGA-based audio controller capable of recording, storing, and replaying voice messages, with user interaction handled through serial terminal communication.
- Designed the system architecture in Vivado, integrating a softcore processor programmed in PicoBlazeassembly to control an audio codec and memory module, demonstrating low-level hardware–software co-design.

RFID Garage Door Opener

- Built an Arduino-based garage door opener in C++ with multi-user RFID authentication with dynamic card enrollment and removal; designed a custom PCB and 3D-printed enclosure for a fully self-contained system.

Technical Skills & Achievements

Languages: Python, TypeScript, C++, C, C#, Swift, Verilog, RISC-V Assembly

Tools/Frameworks: PyTorch, AWS, React, Tailwind, FastAPI, RESTful APIs, WebSockets, Numpy, Git, Postman, Jira, Power Apps

Achievements: Eagle Scout, National Merit Scholar, Microsoft Power Platform App Maker Certification