

Manuel Capiendo

manuelgcapiendo@gmail.com | www.mgcapiendo.com | linkedin.com/in/capiendo | github.com/mgcapiendo

Active DOD Secret Level Security Clearance

Education

Florida Atlantic University | Bachelor of Science

Expected August 2026

Major: **Computer Science** | Minor: **Artificial Intelligence**

- Relevant Coursework: Data Mining & Machine Learning, Design/Analysis of Algorithms, Data Science Analytics, Artificial Intelligence, Data Structures & Algorithms, Database Structures, Software Engineering, C/C++, Python, Assembly

Skills

Languages:

Python, C/C++,
JavaScript, HTML, CSS

Frameworks:

React, React Native,
Angular, Next.js, Node.js

Data/ML:

Pytorch, Scikit-Learn,
Pandas, SQL, MongoDB

Tools/Platforms:

Linux, Git Version
Control, Postman

Practices:

Agile/Scrum, CI/CD

Certifications:

AWS CPP

Experience

NextEra Energy | *IT Nuclear Solutions Analyst Intern*

Summer 2025

- Gaining hands-on experience developing AI-powered digital twin models in nuclear operations, developing expertise in both AI implementation and industrial system optimization.
- Enhancing cross-functional collaboration by working closely with nuclear engineers and data scientists to develop AI-driven solutions that improve safety and operational reliability in nuclear environments.

Spartan Corporation | *Acoustic Engineering Intern*

Summer 2024

- Spearheaded the development of a testing system for sonobuoy piezoelectric ceramics in **C**, integrating advanced **hardware automation** and custom-built software to **reduce testing time by 75%** from 160 seconds to just 40 seconds.
- Designed and deployed an automated **SQL**-based data pipeline to process 1,000+ sonobuoy component tests, **reducing data retrieval time by 50%** and ensuring high-precision analysis for acoustic engineering applications.

Projects

Thrill Seeker | *JavaScript, HTML, CSS*

May 2025

- Developed a GeoGuessr-inspired theme park guessing game utilizing **JavaScript** for game mechanics, **HTML image maps** for location selection, and implemented **customizable difficulty settings** with **random image generation**.

Schedule Optimizer | *JavaScript, React, Next.js, MongoDB*

March 2025

- Developed a CRUD task management application using **Next.js** and **MongoDB**, customized interface, popup task details, and persistent storage, providing seamless task organization while enhancing user productivity.

LeetCode Tracker | *JavaScript, React Native*

February 2025

- Developed a **React Native mobile app** with a minimal UI, allowing users to log, track, and visualize their LeetCode progress asynchronously, storing 100+ problem entries using async storage for user storage across sessions.

Portfolio Website | *JavaScript, React, Next.js*

January 2025

- Created a fully responsive and interactive portfolio website with **Next.js** to showcase projects, professional experience, and resume, featuring a modern design with smooth animations, mobile optimization, and seamless navigation.

Involvement

Instructional Coder | *South Florida Tech Hub*

February 2025 - Present

- Volunteer coding instructor for monthly in-person coding classes designed for K-12 students, creating an engaging and supportive learning environment while introducing fundamental programming concepts.

Cognitive Hackathon - 2nd Place | *Python*

August 2024

- Developed an AI-driven optimization solution using **Python** utilizing Ant Colony Optimization to **reduce route inefficiencies by 10%**, contributing to innovative energy initiatives, for sustainable resource management through swarms.

Leadership

Midshipman | *Naval Reserve Officer Training Corps*

Summer 2021 - Spring 2023

- Cultivated advanced leadership skills through comprehensive military training, successfully completing rigorous physical and academic performance assessments.
- Demonstrated strategic team leadership by coordinating group training exercises and **mentoring 4 junior midshipmen**, improving team performance and individual professional development.

Ambassador | *Asian American Association*

Spring 2022 - Spring 2023

- Strengthened event coordination and cross-cultural communication by actively **supporting and organizing 11 diverse cultural events**, fostering deeper interpersonal connections and enhancing organizational engagement.
- Played a key role in promoting and preserving cultural heritage by leading outreach efforts, assisting in event logistics, and ensuring smooth execution of operations to increase member participation and awareness.