

# Manuel Capiendo

(561) 762-2314 | manuelgcapiendo@gmail.com | linkedin.com/in/capiendo | github.com/mgcapiendo

Active DOD Secret Level Security Clearance

## EDUCATION

Florida Atlantic University | Bachelor of Science

Expected 2026

Boca Raton, FL

Major: Computer Science

Minor: Artificial Intelligence

The University of Memphis | Navy Reserves Officer Training Corps

Transferred 2023

Memphis, TN

## WORK EXPERIENCE

Sparton Corporation | DeLand, FL

May 2024 - August 2024

Acoustic Engineering Intern

- Spearheaded development for a Piezoelectric Ceramic Analyzer using LabWindows/CVI and the HIOKI IM3570, cutting testing cycle time from 160 seconds to 40 seconds boosting efficiency by 75%.
- Automated data collection and integration by connecting the software with an SQL server, increasing data retrieval speed by over 50% and automating the management of thousands of cells, improving accuracy and efficiency.
- Adapted and optimized the software for various systems, showcasing a flexible and scalable design that aligned with Six Sigma principles for enhanced quality control.
- Supported sonobuoy production through detailed analysis, simulations, calculations, and documentation, contributing to a 20% improvement in project timelines.
- Conducted in-house hydrophone tests to Navy standards using LabView, ensuring 100% compliance with regulatory requirements.

## RELEVANT SKILLS

### Programming Languages:

C, C++, Python, JavaScript, SQL

### Platforms:

LabWindows, LabView, Shiny, React, Angular

### Certifications:

AWS Certified Cloud Practitioner

Lean Six Sigma White Belt

Jira Fundamentals Badge

## PROJECTS

Biotech Hackathon

January 2025

Team Lead

- Led a four-person interdisciplinary team in developing an AI-powered tool to map and predict mycobiome behavior, combining bioinformatics with machine learning for health research applications
- Created a comprehensive software solution incorporating interactive body mapping, population distribution tracking, and real-time simulation of mycobiome states under various environmental conditions.
- Successfully presented research findings and software demo to industry professionals, synthesizing complex biological concepts with practical technological applications.

Cognitive Hackathon

August 2024

Solo Developer - 2nd Place

- Developed and implemented a Python-based swarm intelligence solution utilizing ant colony optimization algorithms to revolutionize waste-to-energy efficiency in urban waste management.
- Built an interactive visualization tool to demonstrate route optimization and resource allocation across multiple collection points.
- Successfully competed against multi-person teams, securing 2nd place through effective presentation of both technical implementation and practical business applications of ant colony optimization on modernized waste management.

## LEADERSHIP

Midshipman | Naval Reserve Officer Training Corps

June 2021 - May 2023

- Managed competing priorities between academic commitments, extracurricular leadership, and Navy responsibilities, consistently meeting deadlines and achieving goals in a fast paced environment.
- Maintained composure and demonstrated strong self-discipline in high-pressure situations, contributing to effective decision-making and leadership development under stress.
- Delivered presentations to large audiences with confidence, refining my ability to convey complex information effectively.
- Led a team of 4 and coordinated group tasks with precision, adapting plans as necessary to meet objectives.