

Manuel Castro

Manuelcastro2021@fau.edu | (786) 863-9977 | <https://www.linkedin.com/in/manuel-castro-458123a2/> |
<https://manuelcastro.club/> | <https://github.com/manuelcastroFau> | <https://github.com/manuelhcastro>

EDUCATION

Florida Atlantic University
Bachelor of Science, Computer Science
GPA 3.72/4.0

Boca Raton, FL
Graduated - August 2023 (Magna Cum Laude)

Relevant Courses: Object Oriented Programming, Principles of Software Engineering, Logic Design, Microcontrollers, Operating Systems, Data structures & Algorithms, Database Management, Web Development, Algorithm design and analysis, Artificial Intelligence, Programming Languages, iOS Development

SKILLS & INTERESTS

- **Technical Skills:** HTML, CSS, jQuery, Bootstrap, NodeJS, Express.js, EJS, GIT, REST API, React. MVC pattern, JSON, MongoDB, SQL, Jenkins, GitHub Actions, Docker, Kubernetes, microservices architecture, cloud computing, Google Cloud Platform, AWS, Web Hosting, and deployment using cPanel, Plesk, and Heroku. Mobile development for iOS, Linux basic administration.
- **Programming Languages:** Ada, C, C++, C#, Java, JavaScript, Python, NodeJS, Bash, Swift
- **Certifications :** Google Cloud Essentials, Data Science
- **Other Involvement:** SHPE, Google Developer Student Club, Data Science, and Machine Learning Club
- **Interests:** Artificial Intelligence, Solving Coding Problems, Arduino, Movies, sudoku, Chess, history, UI/UX Design, AI, Photography and cooking.

WORK/PROJECTS EXPERIENCE

Lockheed Martin

Software Engineer Associate

Manassas, VA

Oct 2023 – Present

Currently working at Rotary and Mission System (RMS) division as part of an agile scrum team who develops software for the US Navy.

- Design and developing solutions implemented in Ada, C++ and Java.
- Maintain current codebase and implement new features requested by our customers.

Atos Unify

Software Engineer Intern

Boca Raton, FL

Feb 2022 – Aug 2023

Current member of NGLs project that is the 911 Emergency service IP network solution that is being implemented for the State of California.

- Working in several areas like unit testing using Jest, designing, and implementing the E2E testing framework using WebdriverIO, Mocha, and Selenium. This allows testing code as soon is merged in a GitHub to provide fast feedback and quick bug detection.
- Participate in Quality Assurance tasks. Implement Automation of the stages of the development cycle using Ci/CD tools like Jenkins, to increase productivity, log generation, decreases the risk of bugs and the need for hotfixes.
- Creating testing tool solutions using dockers containers and Kubernetes. This allows us to create an isolated environment from the deployed application to execute all the load, performance, and functional tests in the application.

Engineer Design Project (Watermark Techniques for Warner Bros.):

Summer 2023

- Create visible and metadata watermarking solutions for Warner Bros to identify piracy when DRM is hacking.
- Implement an AWS based solution using EC2, S3 buckets, CloudFront CDN, Aws MediaLive and MediaPackage.
- Simulate a Live and VOD streaming signal, embed the watermarks in the streaming and being able to quickly validate and recognize pirates stream signals over CDN.

Mobile App Development (iOS - Swift):

Spring 2023

- Created an IMDb clone using TMDB API to get data in JSON and provide users with the information of latest movies with their posters and ratings.
- Twitter client clone using Twitter API in which users can authenticate their account and post/view tweets.
- Instagram clone that allows users to post, comment, and like pictures using back4app as backend service provider

Software Engineering Project (MYRLE - MERN Stack):

Spring 2022

- Create a web app to provide a solution for senior communities. This is an application focused on seniors' users and their needs, with a UI designed to be easy and intuitive.
- The application allows to access to useful information for seniors like bus schedules, state resources for seniors, community activities and clubs. A payment interface center to pay community fees, discussion boards for residents, and a basic carpooling system.
- All these features increase the quality of life for seniors and help them to better use of the resources created for them.

Truck Tracking Service:*Spring 2022*

- A tracking system solution for truck road service and towing businesses. The web app allows small businesses to provide to users a real-time location service and provide quotes depending on the distance and services selected.
- Use an email/SMS notification system to communicate with all the parties (client, business, and drivers). Also incorporate a payment system using PayPal API or other vendors' payment systems.
- This brings the power of the latest technologies to support small businesses and their needs.