Edyan Cruz

Education

B.S. in Software Engineering, University of Puerto Rico Mayagüez Campus (UPRM)

Aug 2022 – May 2027 Mayagüez, Puerto Rico

Relevant Coursework: Introduction to Computer Science, Advanced Programming, Fundamentals of

Computing, Data Structures (Currently taking)

Cumulative GPA: 4.00

Technical Skills

Languages (C++, JavaScript, TypeScript, Java, Python), Technologies (Git, Node.js, Linux, Docker, ROS, HTML, CSS)

Experience

Mentor for UPRM Hacks Camp 2023, University of Puerto Rico Mayagüez Campus (UPRM)

Jun 2023 – Jul 2023

• Guided and supported a cohort of 30 students, offering hands-on assistance in coding, app design, and problem-solving using MIT App Inventor.

Mayagüez, Puerto Rico

- Fostered a collaborative and inclusive learning environment by hosting a series of interactive trust-building activities.
- Demonstrated effective communication and interpersonal skills by sharing career insights and advice with aspiring computer science and engineering students.

Software Architect Leader, RUMarino Autonomous Underwater Vehicle (AUV) Team

Dec 2022 – present Mayagüez, Puerto Rico

- Led a team of 3 software engineers in the design, implementation, and maintenance of the software architecture for RUMarino's AUV, which will compete in the RoboSub 2024 competition.
- Designed the AUV's software architecture in collaboration with other divisions using **ROS** and **Docker** to ensure modularity, scalability, and ease of mainteinance.
- Developed the task planning framework for the AUV using Python and SMACH (state machines) to autonomously plan and execute complex tasks based on sensor data.

Projects

Discord Applications Bot, Personal Project

Jun 2023 - Jul 2023

- Created a user-friendly Discord bot using **TypeScript** and **Node.js**, allowing server moderators to seamlessly collect, manage, and organize user applications within the platform interface.
- Utilized the Sequelize library to optimize data handling and storage through **SQLite**, enhancing the bot's functionality by storing the applications in a **database**.
- Successfully improved code quality and reliability by conducting a comprehensive rewrite from **JavaScript** to **TypeScript**.

Snake Game, Academic project (Source code available upon request)

Apr 2023 - May 2023

- Created an unique variant of the Snake video game in C++ using the OpenFrameworks toolkit for the Advanced Programming course.
- Demonstrated effective teamwork by collaborating with a partner throughout development, resulting in an organized and well-tested project.
- Implemented sprites for the snake with smooth locomotion to enhance the visual appeal and gameplay experience.

Integral Approximator, Personal Project 🖸

Feb 2023

- Created an user-friendly **Python** GUI program for approximating integrals, employing multiple libraries such as **Sympy** and **PySimpleGUI**.
- Demonstrated strong problem-solving skills by developing an efficient and user-friendly application.
- Showcased proficiency in object-oriented programming with **Python** and familiarity with mathematical concepts related to integrals.

Extracurriculars

Google Tech Immersion, Scholar

Aug 2023

• Invited to participate in Google Tech Immersion, an exclusive 5-week program for aspiring engineers from HBCUs and HSIs that allows selected scholars to work closely with Google engineers to develop core engineering skills and sharpen CS fundamentals.

UPRM Competitive Programming Team, Member

May 2023 - present

- Actively participated in intensive training sessions from ICPC Caribe focused on enhancing problem-solving skills and mastering advanced algorithms and data structures using C++.
- Collaborated with a team of three members, including myself, to solve challenging programming problems, fostering effective communication, teamwork, and creative thinking.