Yariel Mercado

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Education

University of Puerto Rico at Mayagüez Mayagüez, Puerto Rico
BS Software Engineering *GPA:* **3.71** Expected Graduation Date: May 2024

Relevant Coursework: Object Oriented Programming, Applied Data Structures & Algorithms, Intro to Software Engineering and Development

Technical Skills

Programming Languages:	Python, Java, C++
Software Tools:	HTML, CSS, Bootstrap, Flask
Other Tools:	Git, LaTeX, CMake

Work Experience

NVIDIA Remote
Verification Methodology Intern May 2022 - August 2022
- Contributed to a metrics dashboard which increased the hardware unit teams' efficiency.
- Metrics board was built with **Flask**, read from **SQL** databases, parsed CSVs with **pandas**, & interfaced **REST APIs**.

Google Remote
Tech Exchange Scholar January 2022 - May 2022
- Selected, after several interview rounds, to become a part of Google's tech exchange program.
- Learned **industry best practices** under the supervision of Google project mentors while launching two full stack websites.
- Collaborated with and received 1:1 mentorship from Google engineers in: applied data structures, full stack development, and career orientation.

VIS Technologies Toa Baja, Puerto Rico
PLC Systems Programmer December 2019 - January 2020
- **Doubled the throughput** of Holsum's assembly line by replacing old and outdated PLC panels with newer ones containing a wider arsenal of commands.
- Collaborated with electrical engineers to develop the PLC interface for Holsum's assembly line.

Technical Projects

Pathway Internships April 2022
- Deployed with **Heroku** an internship review board website alongside teammates.
- Allows users to post internship reviews for a company under their account. Company scores are appropriately updated and ranked.
- Built the backend utilizing the **Flask** framework. User data is **securely encrypted** and stored along with reviews in a CRUD, **MongoDB** database. Integrated unit testing during development.

Embedded Systems Elevator Project July 2021-December 2021
- Developed a virtual elevator management system along members of the RUMarino embedded division.
- **Mentored** the first years collaborating with the team and got them up to speed in: **OOP, C++, and Git**.
- Utilizing two Arduinos serially connected to a laptop, the elevator system, written in **C++**, was controlled via a **Python** GUI on a laptop.

Sudoku GUI/Backtracking Algorithm Visualizer July 2021
- Created an interactive Sudoku GUI, implemented with the **Pygame** library, which allows users to not only play the game, but visualize how the backtracking algorithm solves the randomly generated Sudoku grid.

Associations

Computer Alliance of Hispanic Serving Institutions (CAHSI) August 2021-Present
- Student association network focused on problem solving as well as professional development and networking.

RUMarino- Autonomous Water Vehicle Club July 2021-Present
- Alongside the leads of the embedded division at the RUMarino student club, currently an integral part of the software development process of the vehicle prototype.