

YARIEL MERCADO

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EDUCATION

University of Puerto Rico at Mayagüez

Expected Graduation Date: May 2024

BS Software Engineering *GPA: 3.73*

Relevant Coursework: Object Oriented Programming, Applied Data Structures & Algorithms,
Intro to Software Engineering, Programming Languages (current), Software Design (current)

TECHNICAL SKILLS

Programming Languages: Python, Java, C++
Software Tools: HTML, CSS, Flask, pandas
Other Tools: Git, L^AT_EX, CMake

WORK EXPERIENCE

NVIDIA

Remote

GPU Design Verification Intern

May 2022 - August 2022

- **Designed** a metrics dashboard which unified **80** hardware teams' data onto an Excel workbook.
- **Doubled** the efficiency of the development cycle by rewriting the script's logic.
- Parsed CSV, YAML, and XLSX files, organized the data onto **pandas** dataframes, and wrote via the **XlsxWriter** library.

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- **Doubled the throughput** of Holsum's assembly line by replacing outdated PLC panels with newer ones containing a wider arsenal of commands.
- Collaborated with electrical engineers to develop the PLC interface.

TECHNICAL PROJECTS

Pathway Internships

April 2022

- Deployed with **Heroku** an internship review board website alongside teammates at Google.
- 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 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, 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-May 2022

- Alongside the leads of the embedded division at the RUMarino student club, formed an integral part of the software development process of the vehicle prototype.