Yariel Mercado

yariel.mercado1@upr.edu · 939-263-3947 · https://github.com/Mercrist/ · https://www.linkedin.com/in/yariel-mercado/

Education

University of Puerto Rico at Mayagüez   Expected Graduation Date: May 2024
B.S. Software Engineering *GPA:* **3.72**

Relevant Coursework: Applied Data Structures & Algorithms, Intro to SWE, Software Design & Testing, Machine Learning, Operating Systems, Cryptography (current), Databases (current)

Technical Skills

Programming Languages:	Python, Java, C/C++
Software Tools:	HTML, CSS, Flask, pandas, JUnit, Guice, Mockito, TensorFlow
Other Tools:	Git, Perforce, LaTeX, SQL

Work Experience

UPRM   On-Site
OS Teaching Assistant   August 2023 - Present
- Placed **in charge** of 30+ students for the weekly Operating Systems laboratories.
- **Reinforced** core concepts, in C, while writing and administering exams.

Google   On-Site
Google Chat Backend Intern   May 2023 - August 2023
- **Introduced** custom metrics collected from **Spanner** RPCs.
- Surfaced the metrics to a live, time-series dashboard tracking over 150+ actions and utilized by **dozens** of teams within Chat.
- **Designed** unit & integration tests to evaluate the metrics via internal Java frameworks.

NVIDIA   Remote
GPU Design Verification Intern   May 2022 - August 2022
- **Engineered** a metrics dashboard which unified **80** hardware teams' data onto Excel.
- **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 engineers while launching two, full stack websites.

Technical Projects

Tweets Disaster Classification   May 2023
- Reached the **top 10** rankings of a competition with a binary text classifier.
- Attained high accuracies by implementing FFNNs & CNNs via **TensorFlow**.
- Utilized **Matplotlib** to develop the frequency analysis for the data.

Pathway Internships   April 2022
- Deployed with **Heroku** an internship review 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.

Embedded Systems Elevator Project   July 2021-December 2021
- Developed a virtual elevator management system along members of the RUMarino embedded division.
- **Mentored** 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.

Associations

Computer Alliance of Hispanic Serving Institutions (CAHSI)   August 2021-Present
- Assisted and mentored several sessions for CAHSI's Coding Club, focused on DS&A.

RUMarino- Autonomous Water Vehicle Club   July 2021-May 2022
- Formed an integral part of the software development process of the submersible.