

SANDY MARRERO HERNÁNDEZ

Mayagüez, PR • 787-319-1506 • sandy.marrero@upr.edu • Github: [sandy-marrero](#) • [LinkedIn](#)

EDUCATION

University of Puerto Rico, Mayagüez

Expected May 2025

Bachelor of Science, Software Engineering

GPA: 3.69

Honors/Awards: Honor Roll 2020-2021, Microsoft Sustainability Hackathon 1st Place

Relevant Courses: Data Structures, Algorithms Analysis, Advanced Programming, Discrete Mathematics, Software Development. Google TechX SDE

ACADEMIC & LEADERSHIP EXPERIENCE

Marketing Associate, IEEE Computer Society Association

November 2022 – Present

- Expanded the reach of activities and promotions in the association. Improved engagement with students and ensured the dissemination of promotions through different channels, to reach a variety of students.

Programming Tutor, Freelance

August 2021 –

Present

- Provided tutoring services for CS students facing difficulties in courses, improved their performance through extra labs, mini assignments and one on one meetings through the semester. Used C++ primarily.

Programming Mentor, Advanced Programming Lab

January 2022 – Present

- Assisted the lab T.A in providing the class laboratory to 30+ students, engaged with the class and provided support and clarification weekly throughout the semester. Voluntary Experience.

Software Developer, UPRM SAE Aero Design Team

June 2022 – January 2023

- Helped refactor a data acquisition system for the aircraft and kept the awards page up-to-date.

Group Leader, UPRM HACKS! Programming Summer Camp

June 2022

- Served as a mentor for 60 high school students on a college programming focused summer camp.
- Introduced the students to CS concepts and app development using MIT App Inventor.

Group Leader, SynBio101 Summer Camp

June 2022

- Supported for a week a 4-person group during the Synthetic Biology summer camp for high school students with the development of a solution for real problems making use of Synthetic Biology.

Group Leader, CoHeMis Summer Camp

June 2022

- Assisted and helped organize a vocational summer camp for high school students interested in arts and science.

RESEARCH EXPERIENCE

Internet of Things Laboratory, University of Puerto Rico, *Dr. Nayda Santiago*

August 2022 - Present

- Collaborate with UTEP and a group of peers to develop a stronger electrical grid capable of sustaining natural disasters, in response to the Hurricane Maria disaster.
- Working with Containers, Docker to containerize and optimize the systems processes and services created, allowing for easier deployment, resource allocation and modularity.

VOLUNTEER EXPERIENCE

Hydroponics IOT, Volunteer Developer

August 2022-

December 2022

- Assisted in the planning and initial Non-Functional Components of an IOT Dashboard for use in hydroponic systems using Figma and React.

UPRM Open House, Volunteer

November 2022

- Collaborated during the presentation of the Computer Science of Engineering Department in the open house, talked with parents and high school students about Computer Science and the UPRM offerings.

Dance and Art Camp (EMBAE), *Volunteer Recreational Leader*

June 2019-August 2019

- Took care of 15 elementary school students in an arts summer camp, provided assistance to the teachers, helped distribute food and provided support for the management of the camp.

Hurricane Maria Shelter, *Volunteer Helper*

September 2017-November 2017

- Assisted in the shelter during the disaster and its recovery, helped distribute the food and drinks to the refugees.