Alberto Ian Cruz Salamán

Student @ University of Puerto Rico Mayaguez
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Fully bilingual (English/Spanish) senior year Computer Science and Electrical Engineer student. Entry-level experience in coding and robotics. Highly interested in internship opportunities that can integrate and strengthen my engineering knowledge and creative problem-solving skills.

Academics:

University of Puerto Rico Mayagüez Campus- Mayaguez, PR   August 2018- June 2023 (Expected)
- Bachelor of Science in Engineering (BSE) – Double Major: Computer Science and Engineering & Electrical Engineering
  - GPA: 3.72
- Approved coursework: *Intro. Programming, Advanced Programming, Computer Fundaments, Data Structures, Circuit Analysis I, Programming Languages, Circuit Analysis II, Electronics I, Logic Circuits, Intro to Software Engineering, Microprocessors and Embedded Systems, Operating Systems, Databases, Computer Networks, Algorithm Design*

Specialized School of Fine Arts -Escuela de Bellas Artes de Carolina- Carolina, PR   August 2011- May 2018
- High School Diploma with a specialization in Digital Art (6 courses, 3 academic years)
- Member of the National Hispanic Recognition Program of the College Board
- Coursework included: *Ceramic, Drawing, Painting, Sculpture, Printing & Photography Courses*

Experience:

- **Microsoft Explore Internship in Software Engineering: Dataverse Performance Team**   June 2021-Present
  - Implement a performance profiling tool into the Dataverse API and make a diagnostic profile that can display execution times of all the subprocesses, plugins libraries and queries to retrieve data. Exposure of the results made available through a custom REST endpoint and visualization achieved utilizing the Speed Scope open-source project.
- **University of Puerto Rico Mayaguez Campus IEEE PES: Luz Verde Project**   May 2021-Present
  - Web development. Implementation of Angular front-end to display results of electric controller for solar power grid output information. Data upload using remote database and retrieval utilizing a REST endpoint developed in Flask.
- **University of Puerto Rico Mayaguez Campus: ML/AI Malware Patterns Research**   March 2021-Present
  - Implementing supervised ML/AI algorithms to recognize malware patterns in distributed code
  - Evaluate and improve current ML/AI algorithms with prospects of implementing unsupervised/neural networks under the mentorship of Dr. Nayda G. Rolón.
- **University of Puerto Rico Mayaguez Campus AON – VEX Robotics Team** (College Level)   August 2019- Present
  - Telemetry Programming Division
    - Develop software to receive the output of the different motors and sensors in a defined time period.
    - Analyze graphs generated by the software output to assess the performance of the individual components in the VEX Robot.
    - Provide feedback to the mechanical division on which component to fine-tune, troubleshoot and improve the overall performance.
    - Improve the accuracy of the robot's location map to further improve the autonomous algorithms.
- **University of Puerto Rico Mayaguez Campus Data Structures Course Teacher Assistantship**   January 2020 – June 2020
  - Explain, design, and send lab tasks and expectations to students after being approved by Dr. Juan O. Lopez.
  - Monitor tests, tutoring and reinforce student's skills during office hours and class hours.
  - Correct assignments and give feedback.

Skills and Abilities:

- **Programming**
  - *Advanced* in **Python, Java, C++/C, Windows OS, Ubuntu OS**
  - *Intermediate* in **Scala, mySQL/PostgreSQL, JavaScript (TypeScript), HTML & CSS**
  - *Novice* in **Assembly Language, GoLang (Google), Arduino/RasberryPI design**
- **Digital Art**
  - Advanced in **Adobe Photoshop, Adobe Illustrator, Sketchbook Pro & Krita, Adobe Premiere, After Effects**

Professional Affiliations & Events:

- **Events**
  - **Chevron's UPRM Powerthon: ¡Vamos Digital!**   *August 2020 – September 2020*
    -Award: 1st Place Overall
- **Professional Affiliations**
  - **Institute of Electrical and Electronics Engineers (IEEE)**   *August 2018- Present*
    -IEEE Scholar Program Mentee 2018
    -Scholar Program Mentor 2020
- **Society of Hispanic Professional Engineers (SHPE) - Member**   *August, 2018- Present*

Volunteer and Leadership Roles

- University of Puerto Rico Mayaguez Campus Athletics - Judo