Alejandro A. Perez Pabon

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STATEMENT

I would like to enhance my understanding of CS and learn more about all the tools used in a professional workspace. Currently seeking an Internship in Software Engineering. I have a powerful desire to learn about software, hardware, the cloud, and the structure of servers. I am an excellent team player and enjoy learning from others as creating a strong bond with the team is a highly important aspect of the work environment.

EDUCATION

University of Puerto Rico- Mayagüez

Mayagüez, PR

BS Software Engineering

2026

• GPA: 3.09

• Coursework: Calculus 1, 2 and 3, Linear Algebra & Differential Equations, Intro to Programming, Advanced Programming, Foundations of Computing, Data Structures and Algorithms, and Intro to Software Engineering

WORK EXPERIENCE / PROJECTS

Crack the Crime Code

February 2023 - March 2023

- Developed a Java project that involved being a police department with the tasks to arrest the boss of every criminal organization and generate a case report file on the total arrests.
- o Achieved through three-phase sprints in which each sprint code was implemented to complete a specific challenge.
- Utilized the Data Structure Linked List to store the names of boss' underlings and arrest them. Upon completion of the sprints, the algorithm fully generates a case report regarding the status of the organization.

Huffman Code

March 2023 - April 2023

- Successfully developed a Huffman Encoding algorithm in Java that takes an input string and returns the encoded string and the difference in bytes.
- Utilized Data Structures concepts, such as Linked List, Hash Table, Sorted Linked List, and Binary Tree to create the Huffman Encoding algorithm.
- o Javadoc comments were added to enhance the understanding of the code and practice documentation.

Particle Simulator

September 2022 – October 2022

- Accomplished a functioning Particle Simulator with C++ and OpenFrameworks where users can change the behavior of the particles through key binds. Some behaviors are incrementing/decreasing particle speed, replaying the key binds the user recorded, and creating a "magnifier" that increments the size of each particle when it passes through said magnifier.
- Used C++ basic concepts like method implementation, loops, and basics of OpenFrameworks.

Spooky Quest RPG

October 2022 – November 2022

- $\circ \quad \text{Implemented an RPG game using C++$ and OpenFrameworks that has three levels and a boss in every stage, and a combat system inspired by "rock-paper-scissors". } \\$
- Outlined by a four-phase sprint.
- o The game offers features, such as increased speed with "Shift" key bind, "g" key bind enabling God mode (invincible), and a friend and pet NPC.
- Used C++ advanced concepts like pointers, inheritance, abstract methods, and vectors.

SKILLS & PROFICIENCIES

 Python, C++, Java, Microsoft (Excel, Word, PowerPoint), Spanish, English as a Second Language, GitHub, Visual Studio Code, Eclipse IDE, Javadoc.