Raphael Sanchez

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OBJECTIVE

Sophomore computer science student at Virginia Tech with a strong foundation in software development, seeking a 2025 summer internship opportunity to apply skills in AI, web development, and programming to real-world projects.

EDUCATION

Virginia Tech

Blacksburg, VA

Aug. 2023 - Present

Bachelor of Science in Computer Science

- Expected Graduation May 2027
- GPA: 3.8/4.0
- Relevant Coursework:

Software Design and Data Structures

Intro to Software Design

Calculus I & II

Foundations of Engineering

EXPERIENCE

GMU AI Scholar Internship

May 2023 – June 2023

Arlington, VA

George Mason University

- Collaborated on a Department of Defense-sponsored program, implementing **machine learning models** in **Python** for image recognition tasks.
- Applied the YOLO (You Only Look Once) Convolutional Neural Network for object detection trained on the Common Objects in Context dataset.
- Handled hardware components for AI applications using a Raspberry Pi.

Server

March 2023 - July 2023

Arlington, VA

Pupatella

- Provided attentive customer service, leading to repeat patronage.
- Communicated orders to kitchen staff in a timely and clear manner.
- Helped train new servers, sharing knowledge and best practices.

Projects

 ${\bf AssignMint} \mid \textit{React, Next.js, TypeScript, Supabase (PostgreSQL), Figma}$

December 2023 – August 2024

- Developed a **full-stack web application** that tracks assignments and exams with an integrated calendar.
- Built a custom **Chrome extension** to streamline assignment tracking by allowing users to import assignments and deadlines directly from **Canvas**, a popular online learning platform.
- Implemented user authentication and a **RESTful API** using **Supabase** to manage data securely.
- Designed a mobile-friendly, intuitive user interface using Figma.

GenreSplit | React, Next.js, TypeScript, Spotify API

May 2024 – August 2024

- Engineered a **web application** to automatically split large Spotify playlists into smaller sub-playlists based on genre using the **Spotify API**.
- Formulated an algorithm to cache artist-genre mappings, reducing redundant API calls by storing previously retrieved genres for artists in a HashMap.

Tower of Hanoi | Java

March 2024

- Devised a **recursive algorithm** to solve the tower of Hanoi problem.
- Leveraged **object-oriented programming (OOP)** principles to design and implement modular and reusable classes.
- Created unit tests with 100% test coverage to assure the quality of all parts of the game.

Professional Skills

Programming Languages: Java, JavaScript/TypeScript, HTML/CSS, Python, SQL (Postgres)

Frameworks: React, Next.js, JUnit, Tailwind CSS

Developer Tools: Git, VS Code, Visual Studio, IntelliJ, Eclipse, Figma

Spoken Languages: Spanish (Fluent)