Alvaro Urtaza

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EDUCATION

University of Houston

August 2021 – May 2025

B.S in Computer Science, Minor in Mathematics, GPA: 3.7

Houston, TX

• Relevant Coursework: Software Design, Data Structures and Algorithms, Data Science and Machine Learning, Operating Systems

Projects

chatAIr | Amadeus, Express.js, Rapid API, React Native

February 2024

- Developed a mobile application with **React Native** that simplifies the flight search process, earning the first-place award for innovation and accessibility in the PROS company track at the 2024 CodeRED hackathon
- Integrated APIs such as **Amadeus** and **Rapid API**, which improved data retrieval speeds by 40%, leading to faster flight search results for users

 $\mathbf{E}+\mid MySQL, Express.js, React, Node.js$

October 2022

- Collaborated with a team of 4 developers by developing a full-stack web application using **React** and **Node.js**, streamlining the buying and selling process for the latest gadgets and electronics
- Integrated a MySQL Database, optimizing data normalization, which reduced redundancy by 25% and improved overall data quality

Davxgnubot | Node.js, Discord.js, Replit

January 2022

- Implemented an interactive Discord bot using **Discord.js** and **Node.js** for a community of 40+ members, integrating features like voice-channel music playback and command responses
- Optimized bot functionality using Replit's Cloud, ultimately eliminating server costs and guaranteeing 24/7
 accessibility for users

EXPERIENCE

Undergraduate Teaching Assistant

January 2022 – Present

University of Houston

Houston, TX

- Assisted the professor with teaching 400+ students the fundamentals of programming using Python
- Taught weekly labs for over 100 students on database related topics such as normalization and concurrency control
- Led weekly labs, conducted office hours, helped debug Python code and provided feedback on SQL assignments

Program Mentor and Tutor

July 2022 – August 2022

TC Energy Summer Scholars Academy

Houston, TX

 Mentored and guided a cohort of 50 recent high school graduates through an intensive Calculus 1 and General Chemistry program, facilitating comprehension of lecture material, addressing doubts, and providing in-depth explanations

ACTIVITIES

CougarCS

September 2021 – Present

Events Chair and Course Lead

- Coordinated and scheduled over 20 events for the semester, blending previously successful concepts with new, innovative ideas to refresh the club's event portfolio
- Collaborated with 30+ tutors by disseminating course updates of information on new labs and assignments, maintaining consistency in guidance offered

Scholar Enrichment Program

September 2021 – Present

Tutor and Office Aide

• Combined educational support and administrative responsibilities, offering 120+ hours of tutoring in computer science and math, alongside facilitating office tasks for staff

TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript, HTML/CSS, SQL, Lua, Java, R

Developer Tools: Git, GitHub, MongoDB, AWS, Postman, MySQL, Google Cloud, Figma

Frameworks/Technologies: React, Node.js, Express.js, Next.js, React Native, Tailwind CSS, Discord.js