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: Data Structures & Algorithms, Operating Systems, Computer Organization and Architecture, Data Science and Machine Learning

PROJECTS

E+ | *MySQL, Express.js, React.js, Node.js*   October 2022
- Collaborated with a team of 4 developers by developing a full-stack web application using **React.js** 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

Automation Scripts | *Python*   July 2022
- Cultivated a **Python** script collection, streamlining processes like video conversion and data compilation, enabling a 65% productivity boost in related tasks
- Achieved a complete elimination of certain repetitive tasks, saving up to 100% of the time previously spent

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**
- Hosted weekly labs, provided assistance and feedback for **Python** programming assignments
- Graded and proctored exams for over 100 students each semester, maintaining academic integrity

Program Mentor and Tutor   July 2022 – August 2022
TC Energy Summer Scholars Academy   *Houston, TX*
- Guided 50 recent high school graduates through an accelerated course of Calculus 1 and General Chemistry by helping them understand lecture material and assisting them with their doubts and questions regarding the topics
- Developed tailored Calculus worksheets for a small group of 5 students, enhancing understanding and leading to a final exam score of 90% or higher for 4 out of 5 students

ACTIVITIES

CougarCS   September 2021 – Present
Course Lead and Tutor
- Collaborated with 30+ tutors by disseminating course updates of information on new labs and assignments, maintaining consistency in guidance offered
- Tutored and assisted 25+ students in computer science and math disciplines, helping them overcome complex topics and improve academic performance

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: Visual Studio Code, JetBrains, Linux, AWS, Google Cloud, React, Git, Linux
Frameworks/Technologies: Express.js, React.js, Next.js, Node.js, Postman, MySQL, MongoDB, Django, Discord.js