Valerie Villafana

Education

Texas A&M University, College Station, TX

Aug. 2019 - Expected May 2024

Major: Bachelor of Science in Computer Science

GPA: 3.0

Relevant Courses: Data Structures & Algorithms, Operating Systems, Database Systems, Machine Learning,

Information Retrieval, Computational Photography

Extracurriculars: Aggie Coding Club, Aggie Web Development Club

Experience

Peer Teacher Aug. 2022 - May 2023

Texas A&M University: Dept. of Computer Science

- Provided one-on-one time with 20+ students to assist with completing homework and debugging programming assignments in C++
- Conducted weekly labs as an additional resource for students to help with lab work and other assignments
- Strengthened students' understanding of material taught in classes and labs, practicing computational thinking and improving programming skills

Tutor Aug. 2021 - Dec. 2022

Texas A&M University: Academic Success Center

- Tutored 10+ students one-to-one and in small groups in Calculus I, Calculus II, and Python
- Drove students to learn how to learn by assisting in finding answers by reviewing essential course concepts and developing effective study habits
- Participated in periodic training (pre-semester training and weekly training)

Projects

Lockheed Martin Graeae (Senior Capstone Project)

Aug. 2023 - Dec. 2023

- · Implemented an remote imaging and image classifier application for identifying and recording items of interest
- Integrated cross-platform Electron application to manages base station sub-tasks and map functionalities
- Developed a user-friendly GUI for intuitive location and visualization of specific objects on a map
- · Achieved recognition by winning second place at CSE Capstone Industry Poster Competition
- Technologies: Electron, Node.js, Python, Raspberry Pi, HTML/CSS, Javascript

HowdyHealth April 2023 - May 2023

- Created with a team of 4 a web application facilitating seamless communication between doctors and patients
- · Enabled scheduling visits, posting updates, and incorporates social media features for easy interaction
- Technologies: PHP, HTML, CSS, Javascript, MySQL, XAMPP

Panda Express POS Nov. 2022 - Dec. 2022

- Build with a team of 5 an online Point of Sale system for Panda Express employees and customers
- · Managed front-end side of server and customer view, ensuring an intuitive and visually appealing design
- · Executed responsive web design techniques to ensure optimal viewing across various devices
- Technologies: HTML, CSS, Javascript, Node.js, Express,js, AWS, PostgreSQL

MoodMelody Nov. 2023 - Dec. 2023

- · Designed a music recommendation engine allowing users to receive song suggestions based on a playlist
- Implemented a content-based recommendation algorithm allowing users to receive songs based on characteristics of selected songs
- · Integrated Spotify's OAuth2, API scopes and endpoints to access user user's data for further process with Flask
- Technologies: Python

Skills

Languages:

C++, Python, PHP, SQL, HTML, CSS, JavaScript, Node.js, Express.js

Technologies & Tools:

Flask, Electron, Git, Linux, XAMPP, Jira, Raspberry Pi, Figma