Vivian Gu

♥ Irvine, CA
Ivvine, CA

Education

Georgia Institute of Technology

BS in Computer Science + Media, Minor in Mathematics

- o GPA: 3.94/4.00
- Coursework: Object-Oriented Programming, Data Structures and Algorithms, Objects and Design, Computer Organization and Programming, Design and Analysis of Algorithms
- Student Organizations: VGDev PR Team, GT LoL/TFT Staff, Web Development Club

Experience

Developer and Project Lead

Atlanta, GA

 $VGDev\ Club$

Aug 2023 - Present

Expected: May 2026

- Leveraged C# and Rust scripts to develop and refine game mechanics, accelerating the development process.
- Directed a team of 30 students in the design and development of a complete game, managing 4 subteams.

Undergraduate Researcher

Atlanta, GA

Robotic Musicianship Lab

Dec 2024 - Present

- $\circ\,$ Developed gaze-based interaction systems for a VR robot using Unity and Meta XR packages.
- o Integrated and optimized robot's responsive features to simulate interaction with humans.

President and Co-founder

Irvine, CA

Math Magicians Branch of Study Smart Youth Services

Nov 2019 - June 2023

- Directed weekly meetings and task distribution of team of 10+ tutors in order to teach free weekly online AMC math classes to 50+ students.
- Applied advertising and teaching strategies to keep students engaged, increasing class sizes by 6x.

Projects

Restaurant Reservation System — Java, Bootstrap

June 2024

- Implemented a full-stack Java web application in a Scrum environment, allowing users to create profiles, make reservations, and gain loyalty points.
- \circ Executed terminal and front-end parity via layered architecture and API requests, effectively storing and updating back-end data such as restaurant availability and loyalty points.

Cellary Kitchen Management — Python, Flask, HTML/CSS, Bootstrap

September 2024

- Led a Flask project to integrate a computer vision model into a digital kitchen inventory management system, resulting in an automated process for tracking ingredients which encouraged reduced food waste.
- Allows for quick scanning of grocery pictures and adjusting of inventory quantities, implemented through a REST API for handling requests between the front-end and back-end.

Personal Portfolio Website — HTML/CSS, Javascript

August 2024

- Developed a responsive webpage using HTML and CSS, enhancing information display across devices.
- Leveraged JavaScript event handlers and queries to implement responsive sliding galleries and pop-ups, improving interactivity and engagement on the site.

Technical Skills

Programming: Java, Python, HTML, CSS, C, C#, GLSL

Frameworks and Tools: Github, Bootstrap, Flask, Unity, UML, Microsoft Office

Languages: English (native), Mandarin (professional proficiency), Spanish (elementary proficiency)