Julia Gomez

San Francisco, CA | linkedin.com/in/julia-gomez/ | +1(415) 688-0381 | julgomez1503@gmail.com

Education

University of San Francisco, B.S in Computer Science | San Francisco, CA

Aug 2022 - Present

Expected Graduation Date: May 2026

Academic Achievements:

• **GPA**: 4.0

- Dean's Honor Roll (2022/2023), (2023/2024) Top 5% of Computer Science Cohort
- Women in Technology Scholarship (2024/2025) Awarded for outstanding academic performance and contributions to the field of technology

Relevant Coursework: Data Structures and Algorithms, Intro to CS II (Java), Intro to CS I (Python), Automata Theory

Skills

- Languages: Proficient Java, Python; Familiar HTML, JavaScript
- Eclipse, VS Code, Sublime, IntelliJ IDEA, Git, Data Structures, Algorithms, Microsoft Excel, Microsoft Word
- Communication, Collaborative, Problem-solving, Task prioritization, Leadership

Relevant Experience

Computer Science TA and Tutor - University of San Francisco

Jan 2024 - Present

- Assisted in teaching **Data Structures and Algorithms**, helping students understand and apply complex concepts to practical programming challenges
- · Conducted office hours and one-on-one tutoring sessions to provide guidance in identifying problems and debugging code
- Graded lab assignments and projects, conducted code reviews and provided detailed feedback to improve code quality and efficiency

Hackathon Participant (Urban Tech) - University of San Francisco

Apr 2024

- Contributed in the development of "Park Pal", a web application aimed at fostering community engagement in local parks
- Led **backend development efforts**, working closely with another backend engineer to implement **Python and Flask** for backend functionalities such as API integrations and server-side scripting
- Assisted the frontend team by experimenting with HTML and JavaScript, ensuring seamless frontend interactions and user experience
- Ensured seamless updates and scalability by implementing Firebase's real-time database to manage and display park events in real-time
- Implemented geolocation features using **GeoPy** and **Photon API** for accurate mapping and integrated AI functionalities using, enabling users to receive personalized park recommendations based on their preferences and location
- Collaborated with a diverse team, participated in brainstorming sessions, adapting quickly to evolving project requirements, engaging in code reviews, continuous integration, and version control using **Git**
- Employed Agile methodologies to manage project development, ensuring flexibility and iterative progress

Leadership Experience

Career Prep Lead (Women in Tech) - University of San Francisco

Mar 2024 - Present

- Organized an event series focused on career preparation in tech, including sessions on resume building, mock interviews, and LinkedIn profile optimization
- Secured and collaborated with industry experts and guest speakers, to deliver high-impact sessions, and managed event logistics for seamless execution
- Developed and implemented a feedback system to continuously improve the event series, gathering participant input to tailor future sessions and address evolving career preparation needs

Community Assistant - University of San Francisco

Aug 2023 - Nov 2023

• Managed daily tasks for the residence hall office, ensuring timely and accurate completion of administrative duties. Addressed and resolved resident concerns, enhancing resident satisfaction

Assistant School Pupil Leader - St. Joseph of Cluny Hr Sec School, Pondicherry, India

Jun 2020 - Apr 2021

• Crafted engaging newsletters and announcements for student dissemination, Spearheaded 10+ school events in collaboration with faculty, boosting student involvement and participation across various activities. Additionally, initiated and led a student support program, actively addressing concerns and gathering feedback for continuous improvement

Projects

- Shortest Path Finder: A backend service that calculates the shortest path between capitals, optimizing travel routes for users. Utilizes graph data structures and Dijkstra's algorithm in Java to calculate and display the shortest paths, achieving a 95% accuracy rate. This project addresses the need for reliable distance calculations between major cities.
- Elevator Simulation: Developed an object-oriented backend simulation of an elevator system in **Java** using **Eclipse**, leveraging **data structures** such as lists, queues, stacks, and heaps for enhanced efficiency and flexibility in simulating elevator behaviors. This project focused on experimenting with with different data structures to optimize elevator operations in a multi-story building.
- PigPlus Dice Game: Backend for a dice game featuring a challenging robot opponent. Developed in Python using Sublime Text, this project aimed to gain practical experience with Python concepts.
- Wheel of Fortune Game: A Python-based game that simulates the popular Wheel of Fortune, available in both human and robot player modes. Additionally, developed a **mobile app** version using Thunkable, integrating the backend logic with a user-friendly interface for a comprehensive gaming experience.
- **Sorting Algorithm Analysis:** Implemented and analyzed five sorting algorithms, including merge sort and quicksort, in **Java** using Eclipse to gain practical insights into algorithmic efficiency. This project involved extensive algorithmic testing and performance optimization.