Simar Cheema

(209) 221-3267 | simarscheema@gmail.com | https://www.linkedin.com/in/simarcheema/

EDUCATION

University of California, Irvine   **Irvine, California**
Bachelor of Science in Computer Science | GPA: 3.91   *September 2021 - December 2024*

EXPERIENCE

Software Engineer Intern   **El Segundo, California**
Major League Baseball   *June 2024 – September 2024*
- Independently developed a test automation project using Node JS and Playwright for MLB's ticket sales website responsible for generating over 8 figures in revenue
- Refactored codebase from 7500+ lines to 250 for easier maintenance and readability
- Developed 100+ end-to-end automation tests for multiple happy path scenarios ensuring full coverage
- Leveraged parallel execution to run 20+ tests across QA and UAT environments in under 3 minutes, reducing manual testing time by over 78.5%
- Used a data driven approach for test cases with CSV files to streamline test case creation and improve readability of test case variables
- Found multiple bugs in lower environments through a deep analysis of automation runs ensuring a stable production environment

Software Engineer Intern   **Costa Mesa, California**
Major League Baseball   *June 2023 – December 2023*
- Automated over 80 end-to-end black box test cases, resulting in reduced test execution time and critical bugs released
- Created a detailed documentation framework to enhance automation efforts by adding unique identifiers on the React front-end website, simplifying XML locator accessibility for automation and QA engineers
- Utilized Allure framework and Sauce Labs for generating reports of automated tests being executed
- Conducted demos and trained software testers in Playwright automation

Full Stack Software Engineer   **Irvine, California**
UCI CubeSat   *October 2022 – September 2023*
- Worked as a full stack developer in a team of 5 to continue the development of a website to monitor satellite operations
- Converted backend from Python to TypeScript and Express for maintainability
- Conducted research about different databases and how their strengths and weaknesses align with the project
- Created database schema and transitioned database from PostgreSQL to MySQL using PlanetScale and inserted mock data into the database to test the full-stack website

Software Developer   **Irvine, California**
UCI ICS Student Council – ZotMeal API   *December 2022 – September 2023*
- Created a new feature to scrape and pull menu data from the UCI Dining website a week in advance and format it
- Currently working on automatically running the script once every day through Amazon AWS

Undergraduate Lab Tutor   **Irvine, California**
UC Irvine   *September 2022 – January 2023*
- Coordinated with a Teaching Assistant to assist 50+ students in an introductory programming class in Python
- Answered questions about programming concepts and code debugging and proctored tests
- Taught fundamental programming concepts such as control structures, basic data structures, functions, and classes

PROJECTS

Full Stack React Game | React Frontend | Express Backend
- Built a full-stack real-time multiplayer game using Node.js, Express, React, and Socket.io
- Utilized RESTful API architecture and socket-based communication to handle game state, player sessions, and game logic
- Created a dynamic and interactive user interface with React and React Router

Zombie Game | View Code
- Designed and developed an interactive third-person shooter game using Pygame with a progression loop
- Designed back-end data structures to store the state of the game as the game progresses
- Created a graphical interface using gimp photo editing software

UniWell Swift IOS App | View Code
- Worked in a group of 4 to develop UniWell, a wellness habit-tracking app, using SwiftUI and Apple HealthKit to track hydration, sleep, and fitness levels
- Implemented personalized recommendations based on user data, integrating GPS, MapKit, and ExerciseAPI for health insights
- Utilized Firebase for secure user data storage, ensuring privacy while offering real-time access to personalized wellness metrics.