Vishil Patel

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Education

University of California, Los Angeles

Master of Science, Data Science
Expected June 2026

Relevant Coursework: Data Structures, Algorithms, Artificial Intelligence, Image Processing

Work Experience

PELLEGRINI LAB   Los Angeles, CA
Software Developer   Sept. 2023 – Sept. 2024

- Developed SAVANT, a Python based web tool for data analysis and data visualization
- Computed molecular signature expression across gene profiles to aid in a priori patient diagnosis
- Created statistical analysis features, such as z-score heatmaps and p-value threshold displays, for precise data interpretation
- Streamlined the user experience by enabling the upload of gene expression matrices, achieving rapid scanning of thousands of gene sets within seconds, significantly improving analysis efficiency
- Integrated the latest Enrichr gene libraries, ensuring up-to-date functionality and genetic insights
- Collaborated with cross-functional teams, including bioinformaticians and software engineers, to refine and enhance tool functionality based on user feedback

Projects

PacMan Clone

- Designed a PacMan clone using C++ and the SDL framework to understand C++ game development, learn polymorphism, and advance my object oriented programming skills
- Optimized game performance by managing memory efficiently and reducing rendering overhead
- Utilized graph search algorithms to mimic ghost AI movement
- Applied debugging techniques, online resources, and documentation to resolve runtime errors

Realtor Information Scraper

- Automated finding property information for a small business leading to increase in customer acquisition, sales, and productivity. Used the Google Sheets API to store important data
- Learned how to perform browser automation and webscraping, while investigating techniques to mimic human interaction and reduce bot detection
- Discovered using browser requests through cURL to gather data even faster than browser automation. Brainstormed and implemented solutions to gather appropriate data for cURL requests

Uber App (React Native)

- Developed a responsive and optimized Uber Clone for androids utilizing React Native
- Implemented real-time user location tracking and mapping utilizing the Google Maps and Google Places Autocomplete APIs
- Stylized different screens with multiple UI components and CSS properties that would best reflect the design layout that the Uber application has

Technical Skills

Programming Languages: Python, C, C++, R, MATLAB, SQL
Web Technologies: JavaScript, CSS, HTML, React
Additional Skills: VS Community, Version Control (Git, Github), Web Scraping, Browser Automation, PC Building, Hardware Troubleshooting, Excel