Jagroop Singh

jagroopsingh1936@gmail.com | (707) 631-1029 | *LinkedIn* | *Github* | *Portfolio*

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, Typescript, C, PHP, SQL, HTML, CSS
Frameworks/Libraries: Fastify, Scikit Learn, Node.js, Express.js, React.js, MongoDB, Axios, Bootstrap, NumPy, Pandas, Matplotlib, Dash, Plotly, SvelteKit, TailwindCSS
Tools: Linux, Git, Jira, Jupyter Notebook, Render, Vercel

EXPERIENCE

Domestic Violence Data Analysis Website | *Link To Website* | *Github*
- Developed and implemented **machine learning models** using Scikit, including clustering and segmentation techniques, to enhance **predictive analytics**
- Cleaned and prepped data from a dozen datasets using Pandas and Numpy
- Deployed interactive website using **advanced visualizations** and exploration of domestic violence trends
- Utilized: Python, Plotly, Dash, Pandas, NumPy, Scikit-Learn

NYC Energy Efficiency Dashboard | *Github*
- Analyzed NYC's energy usage data to develop interactive dashboard highlighting **energy efficiency** metrics
- Used **Energy Star Score** to rank boroughs of NYC in terms of efficient energy usage
- Implemented **RAG** architecture to augment accuracy of energy analysis
- Utilized: Python, Plotly, Dash, Pandas, NumPy

Tutoring Company Website | *Github*
- Led a team of 8 students in developing a dynamic and user-friendly website for a tutoring startup
- Used **Agile methodology** to efficiently build our project and to track our progress as a team
- Documented every phase of the **Software Development Life Cycle** and responded to changing demands from the client in a productive manner
- Utilized: Express.js, React, Node.js, MongoDB, Axios

CTI Micro-Internship, Fastify Web Framework | *Blog Post*
- Investigated the Fastify codebase in order to determine how custom logger attributes could be implemented in an efficient manner
- Provided a **low overhead solution** for implementing custom logger attributes by analyzing best practices used by Pino-HTTP which served as the inspiration for this issue
- Utilized: Node.js, Typescript

EDUCATION

California State University, Sacramento
Bachelor of Science   **Expected: December 2026**
Major in Computer Science
GPA: 3.5;
Coursework: Data Structures and Algorithms, Computer Software Engineering, Discrete Structures For Computer Science, Assembly Programming, Introduction To Programming, System Programming in Unix, Object-Oriented Computer Graphics Programming, Database Management Systems, Computer Organization

ACTIVITIES

Computing Talent Initiative (CTI)   June 2024 – Present
Data Structures and Algorithms Club   August 2024 – Present
Data Science Club   August 2024 – Present