

# SHIV JHALANI

(408) 333-1778 | Santa Clara, CA | shivjhalani@gmail.com | [linkedin.com/in/shivjhalani/](https://www.linkedin.com/in/shivjhalani/) | [sihalani7.github.io/personal-portfolio/](https://sihalani7.github.io/personal-portfolio/)

## EDUCATION

**Santa Clara University, College of Arts & Sciences** (Santa Clara, California) September 2021 - June 2025  
*Bachelor of Science in Computer Science (Data Science Emphasis), Minor in Mathematics* GPA: 3.96

- **Relevant Coursework:** Data Science, Data Mining, Applied Machine Learning, Discrete Mathematics, Linear Algebra
- **Activities & Societies:** Theta Tau Professional Engineering Fraternity – *Professional Development Chair* (2023-24), Association for Computing Machinery – *Director of Communication* (2023-24), Ciocca Center for Innovation & Entrepreneurship – *Director of Communication* (2023-24), Career Center – *Peer Career Advisor*
- **Awards and Honors:** Alpha Sigma Nu, Phi Beta Kappa, Upsilon Pi Epsilon, Student Life Award, University Honors Program

## SKILLS

- **Languages & Technologies:** Python, C++, SQL, Flask, Git, Java, AWS Lambda, AWS Step Functions, JavaScript
- **Areas of Focus:** Machine Learning, Data Science, Natural Language Processing, API Design & Development, Research

## WORK EXPERIENCE

**INRIX, Backend Software Engineer** August 2025 - Present

- Develop & optimize high-performance APIs & software solutions using Python, Java, and AWS to deliver mobility data solutions
- Architect & integrate scalable data processing workflows to enable new customer-facing features while maintaining existing systems with focus on clean code & CI/CD best practices, while maintaining cost efficiency across cloud-native environments

**INRIX, Backend Software Engineering Intern** June 2024 - September 2024

- Enhanced efficiency of customer-facing API using **Python, Java, & AWS** technologies, cutting costs by **30%-90%**
- Upgraded legacy code to modern versions to improve performance & maintainability while ensuring backward compatibility

**INRIX, Software Engineering Intern** June 2023 - September 2023

- Implemented automated multithreaded data ingestion pipeline for an internal tool using **Java, Python, & AWS** technologies
- Mitigated error-prone data update process, improved efficiency by 20%, deployed code to production & tested in CI/CD pipeline
- Led 11-member team to final round of company-wide hackathon, through global cross-team collaboration & project management

## RELEVANT RESEARCH

**Clickbait Detection on Social Media Platforms using Topic Modeling**, *Research Assistant* January 2024 - June 2025

- Collaborated with team of 2 to detect clickbait on social media through **OpenAI APIs & topic modeling algorithms** like LDA
- Utilized OpenAI APIs to summarize text columns, transform into vectors using sentenceTransformers library & employ cosine similarity to **quantify correlation** between the title & transcripts on two different datasets of a total of over 7700 rows
- Co-authored research paper detailing significant findings, **presented & published** at the 2024 IISA conference

**Online Hate Speech Spreader Detection using Modified PageRank Algorithm**, *Research Lead* October 2021 - January 2024

- Led team of 3 to detect & flag hate speech spreaders on online social networks using **Python** & libraries like sklearn
- Modified Google's PageRank algorithm to implement **graph-based** model using adjacency matrices to calculate user influence & measure hate speech spread within user networks, enabling **data & network analysis** on pre-trained **machine learning** models
- Co-authored research paper detailing significant findings, **presented & published** at the 2023 International DSML conference

## RELEVANT PROJECTS

**Post Filtering Extension**, *Backend Developer* (1st Place Winner - Replit Award, xAI Hackathon) October 2024

- Designed & implemented backend architecture of Chrome extension that filters out engagement farmers, self-promoters, & bots on X using **Grok 2 LLM** and **xAI APIs**, fostering relevant and meaningful conversations
- Integrated X APIs to retrieve and process posts in a streaming architecture, enabling incremental data delivery & reduced latency

**Academic Support Platform**, *Backend Developer* (Google Gemini API Developer Competition) August 2024

- Engineered backend architecture of web application designed to enhance academic life by simplifying course registration & providing real-time academic support using **Python, Flask, & effective prompt engineering** for **Google's Gemini API**
- Utilized Google's **Gemini API** to develop AI-driven Virtual Tutor & Academic Advisor tools for personalized student assistance
- Integrated **Firestore** for secure data storage & efficient management of chat histories, ensuring reliable app performance

**Career Fair Data Analysis Automation**, *Script Developer* April 2023

- Developed **Python** program using pandas library to automate the data analysis process for career fairs, providing quick & accurate insights into student & employer trends based on demographics & feedback
- Reduced manual work & saved a week's worth of time, increasing efficiency by **700%** over **900+** rows of data

**Trip Generator App**, *Backend Developer* (1st Place Winner, SCU INRIX hackathon) November 2022

- Designed & implemented application backend using **Python, Flask, & INRIX Routing API** to develop optimized routing algorithm for users that generate an itinerary based on hotspots in a geographic location
- Identified & implemented relevant **graph** theory to develop optimal routing algorithm in under 24 hours
- Implemented **Flask API** to return line strings of coordinates to enable front-end map routing on Google Maps plugin