

# Shivani Singh

San Francisco, CA | +1 571 337 0488 | [shsingh844@gmail.com](mailto:shsingh844@gmail.com) | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

*Eligible for UK Skilled Worker Visa Sponsorship | Available for immediate relocation to London*

## SUMMARY

Full-stack software engineer with 3+ years building production AI applications and scalable infrastructure. Expertise in 0→1 product development spanning frontend to distributed backends. Proven track record reducing infrastructure costs through Kubernetes optimization and accelerating development cycles through scalable architecture. Pursuing doctoral research in predictive analytics while maintaining technical edge through independent work. Seeking challenging engineering roles in London.

## TECHNICAL SKILLS

**AI & ML:** LLM Integration & Deployment, Production ML Systems, Agent Systems, Model Serving & Orchestration, Prompt Engineering, Claude API, OpenAI, LangChain, RAG, Statistical Analysis, Predictive Analytics, TensorFlow, PyTorch, scikit-learn

**Development:** Python, Ruby, React, TypeScript, JavaScript, Flask, Node.js, RESTful APIs, WebRTC, Full-Stack Development, Microservices, Event-Driven Architecture

**Data & Infrastructure:** R, SQL, ETL/ELT Pipelines, PostgreSQL, Airflow, Databricks, Prometheus, Grafana, Docker, Kubernetes, CI/CD, AWS, Azure, Terraform, Tableau, Power BI, BigQuery

## EXPERIENCE

### Independent Software Consultant + DBA Scholar | San Francisco, CA

Nov 2022 - Present

- Built real-time weather balloon analytics platform with Claude API integration, implementing multi-modal prompt engineering for atmospheric pattern analysis and intelligent caching for 24-hour continuous operation, dramatically reducing telemetry analysis time while enabling data-driven operational decisions
- Developed AI-powered fashion platform using GPT-4 and LangChain with PostgreSQL behavioural tracking and geospatial filtering, achieving strong user engagement through personalized recommendations
- Architected production cloud infrastructure with automated CI/CD pipelines for React/Flask applications, implementing monitoring and database optimization achieving sub-second query response times
- Conducting doctoral research analyzing reputational contagion from 2,180 major bank failures on small regional banks using event study methodology and data triangulation, developing regulatory intervention framework and early-warning indicators to prevent secondary collapses

### Mixhalo | San Francisco, CA

Apr 2022 - Nov 2022

#### Full Stack Engineer

- Led 0→1 development of real-time translation prototype that became company's flagship monetization product, directly influencing future investor presentations and product roadmap pivot toward translation services
- Designed scalable WebRTC architecture through systematic evaluation of multiple frameworks, reducing future product R&D cycles and establishing reusable patterns for all streaming features
- Reduced infrastructure costs by 67%, architecting Kubernetes-based deployment system that improved deployment frequency from weekly to daily, eliminating DevOps bottlenecks for engineering team
- Built end-to-end observability platform capturing user interactions and system metrics, dramatically reducing incident response time and enabling data-driven product decisions that shaped company roadmap

**Extreme Networks** | San Jose, CA

Mar 2020 - Apr 2022

### **Software Engineer**

- Architected company-wide data platform consolidating multiple siloed systems into unified warehouse processing millions of events monthly, dramatically reducing executive reporting cycles across business units
- Delivered self-service analytics platform with multiple Tableau/Power BI dashboards heavily used across organization, dramatically reducing ad-hoc reporting requests and freeing capacity for strategic initiatives
- Delivered multiple production features for ExtremeIQ cloud networking platform managing thousands of enterprise devices, gaining deep expertise in TCP/IP, DNS, VPNs, which accelerated customer issue resolution
- Established comprehensive testing framework integrated into CI/CD pipeline, reducing production incidents by 45% and deployment rollbacks significantly, enabling team to accelerate feature velocity

### **Frontend Engineering Intern**

- Led UI redesign that significantly increased customer satisfaction through user research and iterative testing, becoming key differentiator in sales demos and customer retention
- Created reusable component library using Dojo framework, significantly reducing code duplication and cutting feature development time across multiple product teams

## **RESEARCH & EDUCATION**

**Westcliff University** | Irvine, CA

Oct 2022 - Present

*Doctor of Business Administration (Business Intelligence & Data Analytics)*

- Developing ML-based financial contagion model analyzing historical bank failures with ensemble methods, achieving strong predictive accuracy; research progressing toward peer-reviewed publication

**Boston University** | Boston, MA

Sep 2018 - Jan 2020

*M.S., Computer Information Systems (Database Management & Business Intelligence)*

- GPA: 3.60

## **NOTABLE PROJECTS**

**Windborne Constellation Tracker** | [Live Demo](#)

- Built production AI analytics platform for weather balloon operations, processing real-time telemetry data with Claude API integration that dramatically reduced analysis time while maintaining high system reliability

**Sustainable Fashion Analytics Platform** | [Live Demo](#)

- Launched AI-powered sustainable fashion platform with strong user engagement through GPT-4-driven personalized recommendations and geospatial brand matching, demonstrating practical consumer-facing AI applications