Khushali Samderiya

+1-719-321-7472 | San Francisco, CA | khushalisam@gmail.com | LinkedIn | GitHub

Professional Summary

Software Engineer with 3+ years of experience building full-stack applications and ML pipelines focused on solving real-world problems. From boosting business revenue by 10% YoY to scaling systems for 100K+ users, I bring a strong foundation in backend systems, deep learning, and cloud technologies including Python, Java, TensorFlow, and Docker.

Skills

Languages & Frameworks: Java, Python, JavaScript, TypeScript, React, Node.js, Express.js, Go, SQL, NoSQL, R, HTML5/CSS3, TensorFlow, PyTorch, Scikit-learn, Hugging Face, Keras, OpenCV
Tools: AWS, GCP, Docker, Kubernetes, Jenkins, Git, MySQL, Redis, Apache, JDBC, Flask, FastAPI
Architecture & Protocols: Software Development Lifecycle (SDLC), Distributed Systems, Sharding, Event-Driven Architecture, Layered Monolith, Fault Tolerance, Load Balancing, RESTful APIs, WebSockets, JWT

Work Experience

Graduate Research Assistant | Bioinformatics Lab, University of Colorado *June 2024 – May 2025*

- Accomplished a **9%** improvement in classification precision (validation accuracy), by engineering end-to-end CNN pipelines with cascading residual blocks and sharded data loaders.
- Achieved a **12%** boost in F1-score (cross-validation), by integrating attention mechanisms and distributed data augmentation (SMOTE, ADASYN, SPLAM).
- Delivered a **40%** reduction in preprocessing runtime, by architecting modular, parallel ML workflows with K-fold validation and optimized one-hot encoding.

Freelance Developer | Midaz Technocraft *Feb 2022 – July 2023*

- Accomplished **$50K** in annual cost savings and **10%** YoY revenue growth, by architecting a full-stack web dashboard for inventory and order cycle management with JSP/Java front-end and MySQL backend.
- Achieved a **55%** reduction in manual tracking effort (time logs), by implementing JWT-secured RESTful APIs with Redis caching.
- Improved financial reporting accuracy by **30%**, by integrating real-time order and cash-flow APIs with idempotent endpoint design.

Software Engineering Intern | J.P. Morgan & Chase *Sep 2021 – Oct 2021*

- Reduced manual analysis time by **35%** (user feedback), by developing live-updating charts with JavaScript and the firm's internal charting library, leveraging WebSockets for real-time data flow.
- Cut data latency by **40%** (pipeline metrics), by streamlining backend stock-data transformations and batching API calls to internal market feeds.
- Enhanced system responsiveness by **25%** (benchmark tests), by refactoring Java services for concurrent processing and introducing edge caching via internal tools.

Software Engineering Intern | Deloitte *Aug 2021 – Sep 2021*

- Achieved a **25%** increase in integration accuracy (QA metrics), by building a fault-tolerant Java ETL pipeline with schema mapping, hash-based duplicate detection, and idempotent transaction handling.
- Enhanced monitoring efficiency by **40%** (ingestion throughput), by architecting an event-driven Power BI telemetry dashboard with real-time metric streaming and retry logic for high availability.
- Reduced security vulnerabilities by **30%** (audit findings), by implementing a policy-driven Java security algorithm with encryption modules and input-validation layers aligned to compliance standards.

Education

University of Colorado — MS in Computer Science, CGPA: 3.8 *May 2025*
Courses: Data Structures and Algorithms, AI, NLP, Advanced Software Engineering, Software Design

St. Francis College for Women, India — BS Hons in Software Engineering, CGPA: 3.67 *Dec 2021*
Courses: Java, C, C++, Database Systems, Operating Systems, Software Architecture

Projects

TriModel Financial Analyzer: Achieved **84%** prediction accuracy (test set), by integrating BERT sentiment analysis, transformer regression on fundamentals, and SVM classifiers on SMA/RSI indicators with a rule-based aggregation layer. Reduced development iterations by **30%**, by architecting modular multi-model pipelines and scalable data-processing workflows.

Star War Simulator: Reduced load time by **20%**, by architecting a React/Redux frontend with optimized asynchronous rendering and WebSocket-driven state synchronization. Improved concurrency by **10%**, by designing a modular component architecture and event-driven Node.js backend.

Certifications

Full Stack Squared, Big Data (IBM), Internet of Things (Cisco), Web Development, Machine Learning, Agile Project Management (PMI)