

Summary

M.S. Software Engineering student at **San José State University** actively seeking **software engineering internships**. Former Software Engineer at **Interactive Brokers** with experience building **large-scale, distributed systems** processing **high-volume production workloads**.

Education

Master of Science | San Jose State University 08/2025 - Expected 05/2027
Software Engineering - GPA: 3.7/4.0 | Machine Learning | Enterprise Software | Distributed Systems

Bachelor of Engineering | University of Mumbai
Computer Engineering - GPA: 3.74/4.0 | Data Structures & Algorithms | Database MS | Distributed Computing

Experience

Software Engineer | Interactive Brokers 01/2023 - 06/2025

- Spearheaded the **Plaid** SDK integration (Payment Initiation, Auth, Identity) into IBKR's **React** application, implementing secure token exchange and resolving embedded browser issues. Builds a **Spring Boot** Open Banking service across **six currencies**, supporting **500k+ users** and enabling HSBC's brokerage partnership, bringing in over **\$200M** in new business.
- Built a **Kubernetes**-deployed **Spring Boot** caching service processing **~100k records** every 10 minutes, reducing match latency from **2.8s to 1.4s**, removing **~4 hours** of startup overhead, and improving system reliability and customer experience.
- Architected an FHSA microservice with a **GraphQL API** for flexible access to transactions, deposits, and balances; designed **React** UIs that replaced manual workflows, cutting transaction time by **90%**.
- Orchestrated monitoring with **Elasticsearch** and **Kibana** to address gaps in incident visibility. Standardized structured logs and engineered **Python**-based dashboards and alerts, reducing **mean time to resolve by 60%**.

Junior Software Engineer | Interactive Brokers 07/2020 - 12/2022

- Developed a **Spring**-based, **Kafka**-driven deposit pipeline that matched users to incoming deposits across **23 currencies** using multi-parameter logic, processing **\$550M+ daily** with **Oracle SQL** and stored procedures supporting high-throughput matching at scale.
- Delivered a **React** and **Spring MVC** operations console giving **72 global operators** visibility into deposit activity. Integrated Oracle SQL-backed audit trails, action timelines, and role-based approval workflows to streamline operator review.
- Reduced unidentified deposits by **50%** through enhancements in deposit-matching libraries; unlocked support for **ILS deposits** by enabling native language processing in **SWIFT** data.
- Scaled **Wise** deposit integration across **10+ currencies**, enabling a widely used funding method for European customers and expanding IBKR's deposit coverage in the region.

Projects

- **Orbit - Cross-Platform Productivity App**: Built a **React Native** app for task management, habit tracking, and notes with offline-first support using **SQLite**. Implemented cursor-based sync to a **FastAPI/PostgreSQL** backend and added **MCP integration** for LLM-powered natural language input.
- **Nidana - Genetic Disorder Detection**: Built a computer vision system using **ResNet-50** with transfer learning in **Keras** and **TensorFlow**. Published in *Int'l Journal of Future Generation Communication and Networking* and presented at ICCTAW and ICRACK conferences.
- **Technical Documentation AI Assistant**: Built an **LangChain/RAG** assistant for querying **10k+ documentation pages** in natural language. Used **Pinecone** for semantic search with embedding pipelines for code snippets and API references. Implemented chunking strategies and metadata filtering to improve retrieval accuracy across versioned docs.

Achievements & Leadership

- **1st Place at Smart India Hackathon 2020** - Led a 4-member team; awarded Rs. 50,000.
- Led the phased rollout of **Open Banking** to all European customers, managing one currency at a time; resolved issues and improved customer experience after each batch, ultimately reaching **1M+ customers**; received **departmental recognition** for most impactful engineer.

Skills

Programming languages: Java, Python, JavaScript, TypeScript, SQL, PHP, C++, C

Technologies/Frameworks: Spring Boot, Spring MVC, Kafka, Redis, Elasticsearch, Kibana, GraphQL, JUnit, Mockito

Web Development: HTML, CSS, Angular, React, Node.js, React Native, Laravel, Redux

Data Science/ML: NumPy, Pandas, TensorFlow, Keras, LangChain, Pinecone

Databases: Oracle, MySQL, MongoDB, Cassandra

Tools/Platforms: Maven, Jira, Git, Gerrit, Confluence, Docker, Jenkins, AWS EC2, AWS S3, AWS Lambda