#### **EDUCATION**

## DJ Sanghvi college of Engineering

CGPA: 9.44/10

**B.E Computer Engineering** 

Aug 2017 - May 2021

Applied Mathematics, Discrete Mathematics, Algorithms, Databases, Machine Learning, Artificial Intelligence, Natural Language Processing, Cloud Computing, Distributed Computing

EXPERIENCE

Morgan Stanley Mumbai

 $Senior\ Full-stack\ Engineer$ 

Dec 2022 - Present

- Working on Reference data real-time DQ/Override consistency check team to ensure data consistency and availability for downstream users primarily using Spring boot, Kafka, MongoDB, and Angular.
- Implemented a **firmwide generic rules engine** framework to facilitate all rule lifecycle, storage, and execution across all business domains. Key features include config-driven onboarding, component extensibility, data model agnostic, and performance.
- Worked on **Data quality engine** implementation, data overrides engine, and **recon engine** all built on top of the rules engine framework.
- Ensured end-to-end delivery for **angular-based Rules UI** with features versioning, support for attributes/functions/values, unit tests (positive/negative test cases on UI), Auto SDLC support
- Introduced **spark-based** impact analysis service which enables users to validate the impact of any rule across **85M+** securities with an easy dashboard for analysis.
- Added a RAG-based GenAI rules butler to enable AI capabilities for rule searching, automated test creation, and test coverage checks. Uses sentence-transformers, multi-agent setup, chromaDb, and GPT-4.
- Introduced Kafka message prioritization to enable processing of business-critical workflows with minimal delay.
- Worked on Event-driven metadata store service which handles metadata distribution to **50+ teams** built using Mongodb, airflow, and Kafka.
- Worked with the data enrichment team to enable trade positions to process 100M+ records daily. Built a data Cross-ref/enrichment/arbitrator module for the same.
- Implemented blue-green deployment strategy with auto verification which enabled hassle-free weekday deployment without any intervention.

### Accolite Digital Pvt Ltd

Remote

Software Engineer (Contract: Morgan Stanley)

July 2021 Dec 2022

- Worked on the exception manager and data gateway platform to manage exceptions across services.
- Helped migrate the existing legacy architecture to message-based queues (Kafka) and set up multiple consumer instances to increase processing throughput from 1500/s to 20000/s.
- Redesigned the exception workflow and introduced Last write wins, versioning, and kafka partition-based streamlining.
- Added Exception suppression/batching/auto-close to schedule batched exception to avoid message overflow for L2 support.
- Improved server query response time for bulk exception search by 300% by restructuring API and optimizing database queries.

# GMoney Solutions Pvt Ltd

Remote

 $Software\ Engineer\ Intern$ 

March 2019 - Jan 2020

- Developed a Django-based backend server and React.js based client for managing loan/background check profiles by providing a complete risk summary for the client profile.
- Used traditional NLP techniques to extract and analyze client profiles from supporting documents.

## Projects

Brainstormy ReactJs, Next.js. 14, Clerk Auth, LiveBlocks, Convex, TailwindCSS

- Built a collaborative, real-time whiteboard for teams to brainstorm ideas. Packed with features such as a real-time database, whiteboard from scratch with the ability to add shapes like Rectangles and Ellipses, Sticky notes, and free-hand Pencil drawing.
- Added RBAC support with the ability to create organizations with invite-only access to participants.

### SKILLS

Programming Languages: Javascript, TypeScript, Python, Java, C, C++, Shell scripting Libraries/Frameworks: Spring Boot, NodeJS, React.js, Angular, Django, GraphQL Tools: Docker, Kafka, Kubernetes, Gradle, Grafana, Airflow, CI/CD

Databases: MongoDB, Postgres SQL, Sybase DB, Redis