ANMOL ARORA

Software Development Engineer with hands-on experience in Cloud Technologies and Database Management. Skilled in building readable, maintainable, testable, scalable, reusable, and efficient code within Agile environments. Committed to innovation, collaboration, and continuous learning to drive technical solutions.

(732) 532-7248 anmol.arora8991@gmail.com in LINKEDIN

Open to Relocation

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, C/C++, SQL, Java, HTML, CSS

Frameworks & Libraries: Django, LangGraph, LangChain, FastAPI, Node.js, React, Apache Spark Databases: RDBMS (PostgreSQL, MSSQL, MySQL), Redis, NoSQL (MongoDB, DynamoDB)

Cloud & Infrastructure: Azure, Docker, Nginx, Uvicorn, Gunicorn, Linux, AWS, Git

WORK EXPERIENCE

Cygnus Compliance Software Developer

Jersey City, NJ

June 2024 - Present

Led zero to one development of a domain-specific Al-powered compliance suite to automate alert summarization and accelerate alert reviews using LLM-based workflows, deployed to 3 enterprise clients

- Architected and developed a Docker-based microservices architecture (Django, Spark, FastAPI, Redis, Postgres), migrating
 from an initial monolithic Django application, reducing setup time by 60% and enabling consistent cloud/on-prem deployments
- Developed a LangGraph-based AI agent with modular tools like RAG, and web search to support case analysts with automated investigation, cutting review time by 35%
- Built a tenant-aware Text-to-SQL agent enabling analysts to query Delta Lake in plain English, reducing SQL dependency and improving result accuracy by 25% via semantic table matching; eliminated 90% of session failures through heartbeat-managed Spark sessions
- Enabled context-aware retrieval in a RAG-based Research Agent by standardizing ingestion of 1,000+ compliance documents (PDF, DOCX) via modular pipelines for metadata extraction, embedding, and vector store updates

Platinum Capital Partners Inc. Backend Development Intern

New York, NY

January 2024 - April 2024

Developed the backend features for a surplus-food marketplace, including APIs for inventory listing and customer reservations across 7 grocery stores

- Containerized 2 Node.js micro-services: Inventory service for store-side stock entry and Order service for processing customer reservations via a Redis queue to enable asynchronous order handling
- Implemented stateless JWT authentication, RBAC, and centralized error-handling middleware across services; deployed the stack using Docker Compose on a Linux VM with PostgreSQL and Redis, supporting ~600 daily API calls

vDOIT Full Stack Developer Intern

Remote

May 2023 - August 2023

Decoupled integration testing from service dependencies by mocking downstream service responses

 Configured a mock server using AWS Lambda and API Gateway to simulate dependent service responses, enabling isolated backend testing and reducing product delivery time by 65% while supporting 10,000+ daily requests

Ajeevi Technologies Software Developer

Noida, India

September 2020 – July 2022

Contributed to migrating a legacy financial data platform and building an automated UAT validation framework integrated with CI/CD pipelines

- Reduced data source onboarding time from 6 months to 1 month (83%) by introducing a two-layer pipeline architecture using AWS Lambda that decoupled ingestion from persistence, enabling standardized integration of 50+ financial data sources
- Built a UI-integrated error reporting system with a form-based chatbot and ticketing API to replace email-based issue intake;
 reduced client resolution time by 26% through automated routing and tracking of reported issues
- Developed an automated Python validation framework with rule-based verification and anomaly detection for UAT; integrated with CI/CD pipelines to identify pre-release issues, eliminating over 40 hours of product team effort per month

TECHNICAL PROJECTS

Python Epoll-Based HTTP Server and Load Balancer | [Link]

 Built a non-blocking, epoll-based HTTP server and load balancer in Python to handle 1,000+ concurrent connections using load balancing algorithms (round-robin, least-connections), reducing CPU usage by ~45% compared to thread-per-connection models

RU Operating System | [Link]

• Engineered 3 vital components to a custom operating system: a user-level thread library for managing worker threads with support for scheduling policies, a two-level page table system for efficient memory management, and a real user-level file system (RUFS) serving as an interface between users and virtual disk storage

EDUCATION

Rutgers University

New Brunswick, NJ

Master of Science (MS), Major: Computer Science

September 2022 - May 2024

Coursework: Natural Language Processing, Machine Learning-I, Machine Learning-II, Intro to AI, Design of Internet Services

Guru Gobind Singh Indraprastha University

New Delhi, India

Bachelor of Technology, Major: Information Technology

August 2016 - June 2020

Coursework: Data Structures and Algorithms, Operating Systems, Computer Networks, Software Engineering, DBMS