Azeez Dandawala

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Education

Stony Brook University, New York Aug 2025 - May 2027

Masters of Science in Computer Science (MSCS); GPA: 4.0 / 4.0

Coursework: Operating Systems, System Security, Vision-Language Modeling, Data Science

Veermata Jijabai Technological Institute, Mumbai Aug 2019 – May 2023

Bachelors of Technology in Computer Engineering; GPA: 8.48/10

Coursework: Data Structures & Algorithms, Database Management Systems, Artificial Intelligence, Big Data Analytics, NLP

Technical Skills

Languages: Python, Java, C++, C, JavaScript, TypeScript, Kotlin, Go, SQL, Shell (Bash), HTML/CSS, XML
Frameworks/Libraries: React, Spring Boot, FastAPI, Django, Streamlit, Flask, Android, Node.js, JUnit, gRPC
Databases & Cloud: PostgreSQL, MySQL, MongoDB, Redis, Oracle, Firebase/Firestore, GCP, Azure, Apache Kafka, Spark
Tools & Platforms: Git, Linux, Docker, Hadoop, Hive, HDFS, Kubernetes, Jenkins, CI/CD, REST API

Experience

Wells Fargo Hyderabad, India

Software Engineer *Sep 2023 – Jul 2025*

- Designed and owned **distributed backend systems (Java, Hadoop, SQL Server)** processing **100 million+** daily records, engineering fault-tolerant workflow orchestration across parallel compute clusters.
- Optimized query execution plans on high-cardinality joins by implementing **partitioning and bucketing strategies** in Hive, reducing shuffle overhead and cutting average processing time by **20%** with improved SLA compliance.
- Worked on **incremental data ingestion system (PostgreSQL, MongoDB, SQL Server)** using CDC patterns over Parquet datasets, eliminating full-table reloads and achieving **3× faster batch runtimes** with lower system load.
- Engineered a **full-stack Python service** with a **Streamlit** frontend, using graph algorithms (NetworkX) to visualize and traverse dependency graphs across **20+** systems, reducing root-cause debugging time by ∼**30%**.

Indian Institute of Technology Bombay Mumbai, India

Research Assistant - Advisor Prof. Manjesh K Hanawal *Sep 2022 – Aug 2023*

- Researched adversarial attack techniques and curated a **15GB+ behavioral dataset** from **OSquery** across **20+ system telemetry SQL tables** to train an ML-based threat detection model.
- Rewrote the **C++ detection backend** in **Node.js** to leverage async, event-driven APIs for high-concurrency ingestion, improving system scalability, simplifying deployment, and seamless integration with frontend in React.
- Architected **Kafka streaming pipelines** transferring real-time telemetry from Osquery to detection systems, enabling sub-second threat detection and reducing incident response time by **40%.**

Fiserv India Pvt. Ltd. Pune, India

Software Development Intern *Jul 2022 – Aug 2022*

- Developed **3 Spring Boot microservices** and **10+ REST APIs (Java, Hibernate ORM, Oracle DB)** enabling secure prepaid card issuance and transaction handling with sub-**300ms** p95 latency.
- Enforced **API rate limiting** using **Redis** (500 req/min per client), reducing failed transactions by **15%** and maintaining sub-300ms p95 latency during peak load.

Projects

Generative AI-Driven Sustainability Benchmarking Automation Tool | *Python, Flask, Azure SDKs* Mar 2024

- Led a team of 4 to build and deploy a **full-stack prototype** on **Azure App Service** during a company-wide hackathon, automating **ESG** PDF report analysis and **reducing manual analysis time by 80%** across **70 company reports**.
- Implemented a **RAG pipeline** combining **Azure Document Intelligence** for PDF extraction, **Azure AI Search** for vector retrieval, and **Azure OpenAI (GPT-4)** for Q&A over **100+** page ESG reports.

Knox – A P2P Chat Application | *Kotlin, Android, Jetpack Compose, TCP, Socket Programming* Mar 2022

- Created a peer-to-peer Android app enabling **real-time messaging and lightweight file sharing** without a central server, achieving < 200ms response time using TCP socket programming.
- Architected the frontend using Jetpack Compose and implemented client-server communication with sockets, leveraging coroutines, Dagger, and secure local storage.

Achievements

- Published research on **process hollowing attacks** at **IEEE COMSNETS 2023** (*Paper* 🔗).
- **Placed 2nd (300+ teams) at Wells Fargo GenAI Hackathon 2024** - RAG-powered incident management console.
- **Secured 1st Place at IIT Hyderabad Elan nVision Hackathon 2022** for peer-to-peer Android chat application.