Teja Swaroop Sayya

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EDUCATION

Masters of Science, Computer Science **May 2025**
University of North Carolina at Charlotte | GPA: 4.0/4.0

Bachelors of Technology, Computer Science **June 2021**
Jawaharlal Nehru Technological University| CGPA: 9/10

PROFESSIONAL EXPERIENCE

Software Developer – CVS Health **Mar 2025 - Present**

- In Pharmacy Care Platform Team, Working on Spring Boot (Microservices architecture) for Pharmacy Management systems, leveraging JUnit/Mockito for TDD and Agile (Jira) workflows. Goal is to reduce post-deployment defects while accelerating feature delivery cycles.
- Implemented multithreaded APIs to retrieve and display real-time patient information, significantly improving data retrieval efficiency.
- Optimized database schemas to ensure scalable and efficient management of patient information.
- Planned & currently working on migration of monolithic prescription processing systems to Spring Cloud, containerizing components with Docker.
- Currently refactoring the entire Backend Code based on the updated new DB schema and implemented CACHE for both UI and backend.

Software Engineer, Verizon(Client) - *Infosys* **Oct 2022 – Dec 2023**

- Worked in the Network Orchestration Team using Spring WebFlux and TMF921 APIs to develop 5G network slicing solutions that automate resource allocation and drive dynamic connectivity.
- Transformed legacy Java EE systems into modern Spring Boot microservices, dramatically enhancing scalability and deployment efficiency for critical network applications.
- Orchestrated containerized network functions on Kubernetes for Verizon's 5G/IoT infrastructure, streamlining the deployment and management of essential communication services.
- Built robust RESTful APIs with Java 11+ and Spring Boot to support voice and data services, enabling seamless real-time communication across the network.
- Designed Kafka-based workflows to handle network alarms, IoT telemetry with fault tolerance, ensuring reliable monitoring and rapid response
- Optimized database integrations by leveraging JPA/Hibernate with Oracle & PostgreSQL, boosting performance for high-volume transactional systems.

Software Engineer, CVS Health(Client) - *Infosys* **May 2021 – Oct 2022**

- In Healthcare Data Engineering Team worked on optimizing Hadoop-based ETL pipelines and clusters (HDFS, YARN) for pharmacy claims and patient data, boosting report efficiency and cluster stability.
- Automated data ingestion and validation workflows using Java/Spring Boot and Unix shell scripts, ensuring HIPAA-compliant processing of sensitive healthcare data.
- Migrated legacy on-premise datasets to Google BigQuery by designing partitioned tables, optimizing SQL queries to streamline claims analytics.
- Collaborated with clinical analysts to implement statistical analyses (regression models, outlier detection) and preprocess clinical notes with Spark, enabling care gap analysis for high-risk patients.
- Developed Spring Boot APIs to integrate Tableau Prep with EHR systems, simplifying access to patient utilization data for internal analysts.

System Engineer - *Infosys* **Jan 2021 – May 2021**

- Collaborated with the Infosys Agile DevOps team to architect and deploy CI/CD pipelines in an open-source environment, streamlining deployments and reducing release cycles.
- Managed Oracle and Microsoft SQL Server databases by creating and maintaining databases, users, roles, and security policies, ensuring optimal performance and data integrity.

TECHNICAL SKILLS

Programming:	**Data Structures and Algorithms (DSA)**, Java, Python, JavaScript/TypeScript
Web Frameworks:	Spring Boot, JPA/Hibernate, FastAPI, Next.Js, REST APIs, Microservices, Kafka
AI/ML Libraries:	TensorFlow/Keras, PyTorch, Hugging Face, LangChain, LLM, RAG
Database/Cloud:	MySQL, Hadoop, HDFS, PySpark, MongoDB, PostgreSQL, AWS, GCP
Developer Tools:	Docker, Git, Google Colab, Anaconda, CUDA

PROJECTS & RESEARCH

- **Chat with Teja Sayya | RAG(Retrieval Augmented Generation):** link
  Built a RAG-based AI agent using LLM functionality and custom data, enabling scalable and context-aware conversational AI Agent.
- **Real-Time Chat Application | Spring Boot, Web Sockets + React**: GitHub Repository
  Developed a real-time chat application using Spring Boot, WebSockets, and React, enabling users to join chat rooms via unique room IDs and communicate seamlessly. Integrated MongoDB for data persistence and deployed containerized microservices using Docker.
- **Alzheimer's Disease Analysis | Machine Learning:** Github Repository
  Researched ML models to analyze the impact of various factors on Alzheimer's risk using Linear Regression, Random Forest, SVMs, and XGBoost.
- **MakeItTalk | Deep Learning models:** Hugging face spaces
  On research paper "MakeItTalk". Converts an Image & Audio file into Facial Animation Video. Used Convolution Neural Networks(CNNs), Recurrent Neural Networks (RNNs), Generative Adversarial Networks (GANs), LSTM (Long Short-Term Memory) networks
- **Connect4 with AI | Alpha-Beta Pruning Search Algorithm:** GitHub Repository
  Developed an AI-powered Connect Four game using Python and Pygame with an interactive GUI. Implemented various algorithms like Minimax and Alpha-Beta Pruning to create challenging AI opponents. Skills: Python programming, AI algorithms, and Search Algorithms via games.
- **Photo App | ReactJs:** link
  Developed a scalable React-based photo sharing application with MongoDB as the database and Material UI for the frontend.
- **AI-Powered Agreement Risk Analyzer | Gemini AI:** link
  SaaS Tool to extract key clauses, assess risks, and simplify document analysis with cutting-edge AI
- **Pixo.ai | Text 2 Image:** link
  SaaS AI Tool to convert Text to Image