# Teja Swaroop Sayya

# **Education**

#### **University of North Carolina**

May 2025

Masters of Science in Computer Science - AI/ML

Certifications

MongoDB Certified Associate Developer — AWS Generative AI(Badge)

# Experience

#### Open Source Developer - GDG

June 2024 – Present

- Collaborating on backend improvements for Rocket. Chat and FitCheck App, optimizing database queries and streamlining API integrations.
- Contributed to the TensorFlow Addons repository, implementing a custom loss function and fixing compatibility issues with TensorFlow.

## Software Engineer - Liberty Global(Client) - Infosys

Oct 2022 - Dec 2023

- Worked in Horizon Platform Engineering Team, Developed microservices (Spring Boot) for real-time content delivery (Netflix/Spotify integrations) and billing systems.
- Modernized legacy monoliths to Spring Cloud architectures for scalable, cloud-native infrastructure.
- Engineered Spring Batch workflows to process millions of daily billing events across European markets.
- Designed RESTful APIs (Spring Boot 3.x) to streamline integrations with third-party services and internal systems.
- Deployed AWS services using Terraform for optimized cloud resource management.
- Designed TMF921-compliant reactive APIs (Spring WebFlux) for 5G network orchestration and automation.

### Software Engineer - Verizon(Client) - Infosys

May 2021 - Oct 2022

- Worked in Network Orchestration Team, developed 5G network slicing solutions using Spring WebFlux and TMF921 APIs for automated resource allocation.
- Modernized legacy Java EE systems to Spring Boot microservices, enhancing scalability and deployment efficiency.
- Orchestrated Kubernetes-based containerized network functions (CNFs) for Verizon's 5G/IoT infrastructure.
- Built RESTful APIs (Java 11+/Spring Boot) for voice/data services to streamline real-time communication.
- Designed Kafka-based workflows for handling network alarms and IoT telemetry with fault tolerance.
- Optimized database integrations (Oracle/PostgreSQL) using JPA/Hibernate for high-volume transactional systems.

# **Skills**

**Programming** Data Structures and Algorithms (DSA), Java, Python, JavaScript

Web Frameworks Spring Boot, JPA/Hibernate, FastAPI, Next.Js, REST APIs, Microservices, Kafka

AI/ML Libraries TensorFlow/Keras, PyTorch, Hugging Face, LangChain, LLM, RAG

Developer Tools Docker, Git, Google Colab, Anaconda, CUDA, AWS, MySQL, PostgreSQL

# **Projects & Research**

#### Chat with Teia Savva — RAG(Retrieval Augmented Generation): Link

Built a RAG-based AI agent with LLM functionality and custom data, Its like my Personal BOT, you can Talk to it. Give a try.

#### MakeItTalk — Deep Learning models: Link

- Engineered a deep learning pipeline combining CNNs, RNNs, and GANs to generate more realistic facial animations.

#### Connect4 with AI — Alpha-Beta Pruning Search Algorithm: Link

Developed an AI-powered Connect4 game using the Alpha-Beta Pruning algorithm for strategic gameplay.

# Alzheimer's Disease Analysis — Machine Learning: Link

 developed a machine learning model to analyze and predict Alzheimer's Disease. The goal was to leverage machine learning techniques to assist in early detection and diagnosis, potentially improving patient outcomes.

### Real-Time Chat Application — Spring Boot, Web Sockets + React: Link, Demo

developed a real-time chat application designed to facilitate seamless communication among users. The application leverages
Spring Boot for the backend, React for the frontend, and WebSockets for real-time data transmission. This setup ensures
efficient and instant messaging capabilities.

# Photo App — ReactJs: Link

 Developed a photo sharing application using React, focusing on creating a user-friendly and responsive interface. The project emphasizes key functionalities such as user authentication, image upload, and display, while utilizing modern technologies and best practices in software development.