

ABHISHEK V S

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Bengaluru, Karnataka - 563123, India

PROFESSIONAL SUMMARY

Data Scientist (2+ years) specializing in Generative AI, speech technologies, and applied NLP. Hands-on experience building and scaling TTS systems, developing RAG pipelines, and deploying LLM/agentic workflows in production. Proficient in MLOps, model optimization, and distributed data workflows. Holds the Databricks Certified Generative AI Engineer Associate credential, demonstrating strong expertise in modern AI engineering.

EXPERIENCE

• Celebal Technologies

Associate Data Scientist

April 2023 - Present

Bengaluru, India

1. Bhashini Project - National Language Translation Mission

Tools: Python, Docker, Git, GitHub, PyTorch, HuggingFace, PyTorch, Virtual Machines, Azure ML, MLOps, NVIDIA Cloud
Sep 2024 - Present

- Led research and development of key speech and language technologies—including Text Normalization, Text-to-Speech (TTS), training and fine-tuning of TTS models, Speaker Recognition, and Lip-Sync models—as part of the Bhashini initiative under the Government of India's Digital India mission.
- Implemented optimization strategies that enhanced TTS output quality and reduced latency—achieving a 20% improvement in naturalness and intelligibility, and cutting response time by 50%, enabling the model to respond in approximately 100ms.
- Successfully deployed an end-to-end voice-cloning TTS model to enhance adaptability and personalization of text-to-speech services.
- Designed and managed end-to-end MLOps workflows, including model packaging, versioning, and deployment of multiple models—such as TTS and Speaker Recognition—on Azure Machine Learning (AML) endpoints, ensuring scalable, secure, and production-grade inference.

2. GenAI ChatBot for ADSS Traders and Dashboard

Tools: Python, FastAPI, Uvicorn, Azure OpenAI, Azure Services, VeraCode, GIT, API Management, Jira, Confluence
May 2024 - July 2024

- Effortlessly integrated real-time API data to drive dynamic updates, leading to a 50% boost in user engagement.
- Leveraged advanced prompt engineering techniques, including Chain of Thought (CoT), Meta, Few-Shot and ReAct prompting to enhance response accuracy and relevance, achieving a 30% improvement.
- Integrated deep link functionality in chatbot responses for seamless user navigation and interaction.
- Architected and deployed a real-time streaming response system for the chatbot, driving a 35% increase in user engagement.
- Deployed all services securely within a private environment and implemented the Service Principal technique, eliminating the need for constant key management. This approach significantly reduced maintenance costs and enhanced security.
- Developed a dashboard to monitor user engagement, track bot uptime and downtime, analyze RAGAS metrics for each query, and provide live conversation logs.

3. GenAI Bot for Dubai Airports (POC)

Tools: Python, FastAPI, Azure OpenAI, Azure Services, Flask, Azure App Services, GIT
Feb 2024 - Apr 2024

- Developed a GenAI chatbot for Dubai Airports to assist both passengers and corporate users with their inquiries and services.
- Enabled passengers to easily check flight status, navigate the airport, and access transportation services, improving their overall travel experience.
- Integrated real-time data for flight updates, navigation, and transportation, ensuring dynamic and accurate responses for passengers.
- Designed and implemented a dual-purpose interface allowing users to select between passenger services and corporate services.
- For corporate users, provided assistance with operational inquiries, flight schedules, and logistical support.
- Applied advanced prompt engineering and integrated Azure OpenAI for intelligent, context-aware responses, ensuring a smooth interaction for both passengers and staff.

- Deployed the GenAI Bot on Azure App Services, ensuring scalable, reliable, and high-performance hosting for real-time interactions.

4. GenAI Legal Bot for Adani Cements

Tools: Azure AI Search, Python, Flask, App Services, OpenAI, Azure Storage, Azure NoSQL

Nov 2023 - Jan 2024

- Enabled the bot to process and interact with a wide range of document formats, including PDF, JPG/PNG, Excel, CSV, and DOCX.
- Enhanced data ingestion latency for PDF data by through asynchronous processing and Implemented a Hybrid AI search system, for efficient document retrieval and integrated OpenAI LLMs for dynamic and accurate query generation.
- Developed a feature that allows users to query and extract information from both structured and unstructured data within documents.
- Incorporated side navigation functionality that highlights the relevant text from documents and shows page numbers, allowing users to view and interact with the exact document excerpt.
- Designed a summarization feature for lawyers, enabling them to generate concise summaries of lengthy documents by clicking a designated button.
- Conducted evaluation using RAGAS metrics—relevancy, recall, and precision—to assess the bot's query response accuracy and effectiveness.
- Deployed the GenAI Legal Bot on Azure App Services, ensuring scalable, reliable, and high-performance hosting for real-time interactions.

• Flip Robo Technology

Data Science Intern

March 2022 - September 2022

Bangalore, India

- Developed machine learning models for regression and classification.
- Performed exploratory data analysis to extract insights and identify relationships within the data.
- Visualized data by distinguishing between continuous and categorical variables.

EDUCATION

• Aditya College Of Engineering

B Tech in Computer Science & Engineering

- Grade: 71%

July 2018 - July 2022

Madanapalle, India

• Swami Vivekananda PU College

Pre-University College (PCMB)

- Grade: 70%

June 2016 - July 2018

India

• Sri Manjunatha English Medium School

SSLC (Secondary Education)

- Grade: 73%

June 2015 - June 2016

India

SKILLS

- **Programming Languages:** Python
- **Frameworks & Libraries:** Flask, FastAPI, Langchain, mlflow, PyTorch, Pandas, Numpy, Scikit-learn, SpaCy, OpenCV, Haystack, LlamaIndex, DSPy, Selenium
- **Data Science & Machine Learning:** Classic ML, MLOps, Deep Learning, LLMs, Speech Systems, Time Series Models(ARIMA & SARIMA), Optimization Techniques
- **LLMs Models:** Meta, OpenAI, Mistral, Databricks, HuggingFace, Ollama
- **Databases and Vector Databases:** MongoDB, PostgreSQL, Chroma, Pinecone, Azure Cognitive Search/ Azure AI search
- **Natural Language Processing (NLP):** RAG/CAG, Multi Agent RAG, Generative AI, Named Entity Recognition, Chatbots, Information Retrieval, Seq2Seq Modeling, Classical NLP, RAGAS metrics
- **Cloud Technologies:** Microsoft Azure, NVIDIA
- **Tools & Technologies:** GIT, SQL, Docker, VeraCode, Jira, Confluence

CERTIFICATIONS

• Databricks Certified Generative AI Engineer Associate - Databricks

October 2025

• Machine Learning with Python - IBM

October 2023

• PG Program in Data Science - DataTrained

October 2023

• Big Data Certificate - DataTrained

October 2023

• Tableau Certificate - DataTrained

October 2023

• Azure AI Fundamentals - Microsoft

December 2023