

ABISHEK SRIDHARAN

+91 9342764046 • abishekahss12@gmail.com

SUMMARY

AI Engineer with hands-on experience building production-grade AI systems and AI SaaS platforms, specializing in embeddings, AI orchestration, knowledge graphs, and multi-modal AI. Proven ability to design end-to-end AI pipelines—from data ingestion and model integration to API deployment and cloud infrastructure.

WORK EXPERIENCE

AI Engineer Intern , Deepkore Technologies

Oct 2025- Present(onsite)

- Worked with Real-time projects and gained hands on experience on AI based SaaS products
 - Built an Internal chatbot for the company and AI assist for the company product
 - Developed an AI-powered pharmaceutical impurity testing system using Neo4j knowledge graphs.
-

EDUCATIONAL CREDENTIALS

Mepco Schlenk Engg College (CGPA:7.16)

Oct 2021 - Apr 2025

- B.Tech-Artificial Intelligence and Data Science
-

FAMILIAR WITH

- **Programming Languages:** Python (Machine Learning , Deep Learning) , C , C++
 - **Databases:** MongoDB, Vector Databases , Neo4J
 - **Backend :** Testing & Validation (Postman),API Integration, Orchestration Logic
 - **Frontend :** Next.js (Basic), Dashboard Development
 - **AWS:** Bedrock , Amplify , EC2
 - **Frameworks:** Langchain,Langraph,Tensorflow, Torch, FastAPI
 - **Certifications(NPTEL) :** Java Programming, Cyber Security , Deep Learning
-

PROJECTS

- **PharmaGraph - Pharmaceutical Knowledge Graph**
 - Developed an AI-powered pharmaceutical impurity analysis system using Neo4j knowledge graphs.
 - Modeled relationships between drug substances, impurities, analytical methods, laboratory instruments, and solvents.
 - Built graph-based recommendation logic to suggest optimal impurity testing methodologies (GC, HPLC, UHPLC) based on chemical properties.
 - Designed API-driven workflows to deliver explainable, traceable AI recommendations for regulated pharmaceutical environments.

- **Deepkore AI Assistant - AI-powered sales-document assistant**

- Built a FastAPI + Next.js AI assistant for semantic search and intelligent retrieval from sales documents.
- Implemented embedding-based retrieval pipelines using Sentence-Transformers and ChromaDB.
- Integrated AWS Bedrock for secure LLM inference and deployed services on AWS EC2 and Amplify.
- Performed API validation and testing using Postman to ensure production reliability.

- **Deepkore AI**

- Developed and deployed an enterprise chatbot (deepkore.ai) that converts company documents into searchable knowledge.
- Designed document ingestion, embedding pipelines, and contextual retrieval logic.
- Enabled fast, accurate employee access to internal information through a modern web interface.

- **SmartLeaf – Plant Disease Classification**

Developed SmartLeaf, an intelligent plant disease classification system using CNN, AlexNet, and VGG16 to accurately detect and categorize plant diseases from leaf images. Implemented preprocessing, model training, evaluation, and deployed a Streamlit-based interface for real-time predictions.

- **Multi-Modal Safety Compliance : YOLO ASCA and Attentive BiGRU for Rule-Based Anomaly Detection in Construction Sites**

YOLO-ASCA enhances construction safety by integrating high-accuracy object detection with semantic rule-based validation, enabling the system to identify safety gear, monitor worker behavior, and automatically assess compliance with predefined safety standards to prevent hazards and improve on-site safety management.

PUBLICATIONS

- **Conference Name:** International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET)
- **Held at :** SSN College of Engineering , Chennai
- **Title of the Submission:** YOLO-ASCA: A Rule-Based Framework for Identifying Safety Risks in Construction Management.
- **Status:** Published