Venkata Lokesh Panthangi AI & ML Engineer

lokeshpanthangi

EDUCATION

MisogiAI By Masai

AI Engineering

Jun 2025 - Present Bangalore

Vasireddy Venkatadri Institute of Technology

B.Tech in Computer Science Engineering - Artificial Intelligence and Machine Learning

Nov 2021 - Apr 2025 Guntur

SKILLS

Gen AI — AI Agents, n8n, LangChain, LangGraph, CrewAI

RAG — Traditional, Multimodal, Knowledge Graphs, Agentic RAG

LLM — Transformers, Fine-Tuning (Unsloth)

Machine Learning — Supervised, Unsupervised, Deep Learning

Core CS — Data Structures and Algorithms, TCP/IP Networking, Computer Networks, Operating Systems, OOP

Databases — MySQL, SQL, Redis, Familiarity with GraphDB

Development — Python, React, FastAPI, Pydantic, Streamlit, Docker, AWS

PROJECTS

Aug 2025 - Aug 2025 JumpApp: 🛮

Tools: Orchestrator, RAG System, Websearch, Deployment, LangChain

Tech Stack: Python, FastAPI, Next.js (TypeScript), MongoDB, Gemini-2.0

- Architected and Created scalable AI workflows using Python, LangChain, and Gemini-2.0, Integrated multilingual translation across 16+ languages, reducing average response latency to <2.5s for global users.
- Developed and deployed an AI-powered YouTube video-specific chatbot with interactive Q&A features that improved user engagement by 40% in pilot testing with 500+ active sessions.
- Integrated frontend and backend systems, resolving complex Git merge conflicts and optimizing performance across the FastAPI-Next.js pipeline.

SpeakEazy: [2] Nov 2023 - Apr 2024

Tools: Deep Learning, MediaPipe, TensorFlow, LSTM, OpenCV

Tech Stack: Python, Django, HTML, CSS, JavaScript

- Led and Developed SpeakEazy with a team of 11 developers, a DL-powered system to bridge the gap between deaf and mute. "Analysis Paralysis" by analyzing their actions and Body language using Deep Learning
- Implemented MediaPipe for accurate body coordinate extraction, enhancing feature precision by 20%, and allowing for better movement tracking and pose detection in real-time application.
- Optimized model accuracy by testing multiple architectures, achieving up to 90% performance through iterative tuning and evaluation using the k-fold cross-validation (k=10), ensuring robust and reliable predictions across diverse datasets.
- Integrated all features into Django, streamlining the project's structure and ensuring a cohesive user experience, while maintaining scalability and reducing latency < 70 ms.

PROFESSIONAL EXPERIENCE

Full Stack Development Intern ~ BrainoVision

• Designed and implemented a part of the Django application for real-time monitoring and management of 50+ pressure pumps across multiple locations and optimizing operational efficiency through self-initiated alerts

Jul 2024 - Dec 2024 Hyderabad

- Tracked and analyzed performance data from 50+ pumps, optimizing operational efficiency and reducing latency of the dashboard by 18% by modifying data retrieval algorithms.
- Generated automated notifications and reporting with Django Channels, cutting response times to critical issues by 30% and improving maintenance scheduling via an event-driven architecture.

ACHIEVEMENTS

- Solved over 200+ LeetCode problems, showcasing strong algorithmic and coding proficiency.
- Wrote an *Unofficial Expansion* for the game *RDR2*, adding innovative gameplay elements.
- Conducted a *Hackathon* in CSM branch, fostering innovation and collaboration among participants.

CERTIFICATES

• Google Associate Cloud Engineer 🗆