VENKATA LOKESH PANTHANGI

📞 +919573580571 ✉ lokeshpantangi@gmail.com 🔗 LinkedIn ⦿ GitHub 🌐 lokeshpanthangi

Education

MisogiAI By Masai - Bengaluru   **Jun 2025 – Present**
AI Engineering

Vasireddy Venkatadri Institute of Technology - Guntur   **Nov 2021 – Apr 2025**
B.Tech in Computer Science Engineering - Artificial Intelligence and Machine Learning

Technical 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

JumppApp | *Python, FastAPI, Next.js (TypeScript), MongoDB, Gemini-2.0, LangChain*   **Aug 2025**

- **Architected and Created** scalable AI workflows using Python, LangChain, and **Gemini-2.0**, **Integrated multilingual translation across 16+ languages**, reducing average **response latency to less than 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**.

Drowsiness Classifier | *Python, TensorFlow, Keras, Flask, SQLite, AWS Cloud*   **Apr 2024**

- Developed a **real-time drowsiness detection system** using Python, OpenCV, and MediaPipe with **4 vision algorithms** achieving less than **100ms processing latency** and **95% detection accuracy**.
- Built a **full-stack web application** with Flask backend and MongoDB integration, supporting **multi-user authentication** and **OTP verification with 99.5% delivery rate**.
- Engineered **computer vision pipeline** combining YOLO object detection and 3D head tracking with calibrated thresholds (**0.25 EAR, 0.42 MAR**) reducing **false positives by 80%**.
- Implemented **intelligent alert system** with dual-mode notifications featuring **3-8 second adaptive response delays** and real-time threshold adjustment based on user patterns.

Experience

Full Stack Development Intern - BrainoVision   **Jul 2024 – Dec 2024**
Hyderabad

- 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 and data analytics.
- 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.