

Aakash Dhakse

Email : aakashdhakse83@gmail.com

Contact : +91 8962645683

[LinkedIn : Aakash Dhakse](#)

[GitHub : https://github.com/Aakashdhakse](https://github.com/Aakashdhakse)

Professional Summary

AI Engineer skilled in building intelligent AI chatbots using Python, FastAPI, and Django. Experienced with modern Generative AI tools including LangChain, LangGraph, HuggingFace, and vector databases such as Pinecone. Strong expertise in prompt engineering, embeddings, RAG systems, and model fine-tuning, with hands-on experience in deploying scalable AI solutions for real-world applications.

TECHNICAL SKILLS

Programming Languages : Python, FastAPI, Django, C, C++.

GenAI Tools :- LangChain, LangGraph, HuggingFace, vector Database(Pinecone).

Modern AI(LLM) :- Prompt engineering, embeddings, RAG, fine-tuning models.

Work Experience

AI Engineer

Codesutra AI - (Dec 03, 2025 – Present)

- Designed and developed **AI-based pet disease detection systems** using **YOLOv8 and OpenCV** for image-based diagnosis support.
- Built **pet emotion recognition models (dogs & cats)** using audio signals with **MFCC feature extraction** and **Wav2Vec fine-tuned models**.
- Worked on **pet toy safety detection**, identifying unsafe or harmful toys using computer vision-based object detection pipelines.
- Integrated **GPT-4** for intelligent analysis, explanation generation, and AI-assisted decision support.
- Performed **data annotation, dataset cleaning, and preprocessing** to improve model robustness and accuracy.
- Generated and utilized **embeddings** for efficient inference and intelligent data handling.

Tech Stack:

Python, LangGraph, FastAPI, YOLOv8, OpenCV, Model Fine-Tuning, AI Pipelines.

SOFT SKILLS

Teamwork , Punctuality , Problem-Solving , Communication , Time Management , Adaptability , curiosity.

PROJECTS

Hand Gesture Control System (Computer Vision)

Built a real-time hand gesture recognition system to control computer actions using a webcam and computer vision techniques.

Key Contributions:

- Implemented **real-time gesture detection** using camera input for human-computer interaction.
- Used **machine learning & vision libraries** to recognize and map hand gestures to system controls.
- Optimized gesture detection pipeline for smooth and responsive performance.
- Designed the project for practical applications like **touchless control systems**.

Tech Stack:

Python, OpenCV, MediaPipe, Computer Vision, Machine Learning.

AI Chatbot System

Developed an AI-powered chatbot with a modular backend architecture to handle dynamic user queries and generate contextual responses.

Key Contributions:

- Designed a structured **Python backend** with separate modules for configuration, prompts, and chatbot logic.
- Implemented **prompt handling and response generation** to support conversational AI workflows.
- Managed environment variables securely using .env for API keys and configurations.
- Built a scalable foundation suitable for **LLM integration and future enhancements**.

Tech Stack:

Python, Langchain, Backend FastAPI, Prompt Engineering.

Worked on Python-based applications and computer vision projects involving real-time detection, and AI chatbot systems development.

EXTRACURRICULAR & LEADERSHIP ROLES

LAN Gaming & CARROM

- I had organized LAN gaming events , which increased participation in gaming .
- Organized carrom tournaments , which brought a lot of excitement and great participation.

Volunteer

- I was a volunteer for the annul function and garba night , where I helped in managing events and coordinating activities .

EDUCATION

Malwa Institute Of Technology, INDORE	2021-2025
B.Tech. Computer Science & Engineering	CGPA 7.4
Little Angel's Convent H.S. School	2020-2021
Class - 12th	89.0%
Little Angel's Convent H.S. School	2018-2019
Class - 10th	85.2%

