# SHIVAM SHARMA

□ +91 9145898381 | @ shivamsharma.aiml@gmail.com | □ LinkedIn | ♥ GitHub | ♥ Jaipur, India

# SUMMARY

Results-driven AI/ML engineer with expertise in Computer Vision, Natural Language Processing (NLP), machine learning, and deep learning. Demonstrated success in developing autonomous AI systems and Generative AI solutions including LLM implementations, model training pipelines, and evaluation frameworks. Proven track record in data preparation, vector databases, and agentic workflows. Proficient in TensorFlow, PyTorch, and production-grade AI system deployment with comprehensive evaluation metrics.

# EXPERIENCE

#### AI Engineer | Jan Elaaj, Delhi

Mar 2025 - Present

- Building production-grade chatbots using modular pipelines integrating MySQL, LLaMA 3.3 70B, BioBERT NER, Pinecone, Flask, and NLP-based components.
- $\bullet$  Engineered chatbot infrastructure compatible with AWS Lambda, achieving 99% uptime and scalable execution.
- Collaborating as an Industrial Specialist with IIT Guwahati for GenAI and Future Computing conferences across India.

#### AI/ML Developer Intern | Jan Elaaj, Delhi

Dec 2024 - Mar 2025

- Developed a real-time mood analysis pipeline leveraging multimodal inputs (images/voice) to recommend personalized colors and activities for mental well-being.
- Combining fine-tuned CNN (VGG19) on FER-2013 (68% accuracy) for image-based mood detection; WhisperX-powered voice processing (90%+ transcription accuracy)
- Integrated Gemini 1.5Flash for sentiment analysis and NLP prompt engineering enhancing contextual understanding of the user emotion, enhancing user engagement by 40%.
- Deployed end-to-end pipeline on AWS (EC2, Lambda, S3) with CI/CD, supporting 1k+ daily requests and 99.9% uptime.

#### Data Sciene Intern | Netparam, Jaipur

June 2024 - July 2024

- Engineered a Home Security Surveillance System using Python and OpenCV, integrating real-time face recognition (Dlib/face\_recognition library) for user authentication with 72% accuracy.
- Automated security logging using dynamic Excel reports (pandas, openpyxl), reducing manual logging time by 70%.

#### Projects

#### PDF Q&A App with Langchain and Llama3.1

- Designed a retrieval augmented generation based Q&A system for document analysis using LangChain, Ollama, and ChromaDB for retrieval and contextual AI responses
- Engineered a scalable Flask-based API for seamless integration of AI models with user-facing applications
- Developed an intuitive Streamlit UI for file upload and query processing, improving usability.

# DrVision: AI-Powered Therapeutic Behavioral Analysis Pipeline

- $\bullet$  Architected an AWS-deployed behavioral analysis pipeline to analyze therapy sessions through facial expressions, vocal sentiment, eye movements, and posture patterns, achieving 95% analysis completion rate .
- Engineered a parallel processing pipeline using ThreadPoolExecutor and Flask API, reducing processing time by 60%.
- Built automated HTML report generation with temporal emotion mapping and actionable insights, orchestrating MediaPipe, Wav2Vec2, AWS Rekognition for concurrent behavioral analysis, while maintaining 95% analysis accuracy.

# MoodLens: Emotion Detection using CNN and FER-2013 Dataset

- $\bullet$  Created emotion detection solutions using CNNs and the FER-2013 dataset.
- · Addressed class imbalance through innovative image augmentation and weight adjustments for enhanced model stability.
- Engineered and optimized custom CNN architectures, including VGG19 and ResNet50v2, achieving a notable 68% accuracy in realtime emotion classification.

# EDUCATION

## Suresh Gyan Vihar University, Jaipur

2022 - 2026

B. Tech in Computer Science & Engineering – Specialization in AI/ML

#### SKILLS

Languages: Python, MySQL, JavaScript, R

Libraries: LangChain, Langgraph, Tensorflow, Scikit-Learn, Pytorch, Pandas, Numpy

AI: LLama, BioBert Ner, OpenAI APIs, LLM fine-tuning, Prompt Engineering, Transfer Learning, WhisperX

DevOps/Cloud: AWS Lambda, EC2, S3, Docker, CI/CD