# Vishal Shivnani

Email: vishal1594@outlook.com

Mobile: +91-8619748600

## PROFESSIONAL SUMMARY

Generative AI Engineer skilled in developing and fine-tuning LLMs, Retrieval-Augmented Generation (RAG), and optimizing Transformer-based architectures. Experienced in deploying AI solutions using LangChain, Hugging Face, and TensorFlow. Passionate about leveraging AI for real-world applications with scalable and efficient models.

### **WORK EXPERIENCE**

# Data Quality Analyst — Arihant Technologies

Ajmer, Rajasthan Jan. '24 – Present

- Led a team of 6 annotators, improving dataset quality by 32%, leading to a 14% increase in model accuracy.
- Optimized annotation workflows, improving data integrity and consistency.
- Collaborated with the ML team to refine data requirements, enhancing model performance.

### Data Scientist I— Talview

Bengaluru, Karnataka Oct. '21 – Dec. '23

- Preprocessed and cleaned large datasets, improving model training efficiency by 30%.
- Developed and deployed predictive models using machine learning techniques for business insights.
- Built classification and regression models, optimizing accuracy through hyperparameter tuning.
- Implemented data visualization techniques to identify trends and patterns for strategic decision-making.
- Collaborated with cross-functional teams to automate data pipelines, improving workflow efficiency.

## **Technical Support Engineer — Talview**

Bengaluru, Karnataka Aug. '18 – Sep. '21

- Provided technical support for the Talview Platform, ensuring smooth client operations.
- Resolved 500+ technical issues monthly using Insomnia, GitHub and Jira, reducing downtime by 25%.
- Collaborated with engineering teams to improve platform performance and user experience.

### **SKILLS**

- Machine Learning & AI: Deep Learning, Transformers, Fine-Tuning, Recommendation Systems, Evaluation Techniques, Agentic AI.
- NLP (Natural Language Processing) & Generative AI: RAG, Prompt Engineering, LLMs (Large Language Models), Embeddings, GANs, Hugging Face, Ollama.
- Computer Vision & Time Series: OpenCV, Stable Diffusion, Time Series Analysis.
- Data Processing & Analytics: Scikit-Learn, SciPy, Data Visualization (Tableau, Power BI).
- Frameworks & Libraries: Pandas, NumPy, Matplotlib, Seaborn, Plotly, TensorFlow, Keras, Nltk, Spacy, LangChain, Gensim.
- Vector Databases & Retrieval: ChromaDB, FAISS, Pinecone, Astra DB.

- Deployment & MLOps: MLflow, AWS Ec2, AWS Bedrock, Streamlit, Docker, Kubernetes, Git, GitHub, Google Colab.
- Programming & Databases: Python, SQL, MongoDB.

# **PROJECTS**

## Financial AI Assistant (Python, LangChain, YFinance, DuckDuckGo API)

- Developed an Al-powered financial recommendation system using multi-agent models.
- Integrated real-time financial news and stock data, improving recommendation accuracy.

## Calorie Counter – Large Image Model (LIM) (Gemini, OpenCV)

- Built an AI-based food image recognition system to estimate calorie values.
- Deployed using Gemini API, achieving 90% accuracy in calorie estimation.

# **Conversational AI Bots (Google Gemini, Streamlit)**

- Developed a Data Science Instructor bot with memory retention for enhanced user interaction.
- Implemented custom AI pipelines, leading to 20% better response accuracy.

## RAG-Based Q&A Bots (ChromaDB, LangChain)

- Designed and deployed two knowledge-based AI assistants querying Bhagavad Gita & Ramayana.
- Improved retrieval efficiency by 40% using optimized vector search techniques.

### Medical Test Results Classification (Scikit-Learn, Pandas, Machine Learning)

- Built an ML classification model to categorize medical test results into Normal, Abnormal, and Inconclusive.
- Trained using structured patient data, achieving high classification accuracy in clinical test datasets.
- Implemented data preprocessing techniques to handle missing values and outliers, improving model reliability.