# Likhith Usurupati

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## Summary

Entry level AI/ML engineer & Data Scientist with a strong foundation in deep learning, computer vision, NLP, and LLMs. Experienced in developing and evaluating machine learning pipelines using Python, TensorFlow, PyTorch, and Scikit-learn. Built end-to-end solutions for fraud detection and medical image analysis as part of academic and internship projects. Comfortable working in collaborative environments and eager to contribute to real-world AI applications through research-driven engineering.

## Education

**SRM Institute of Science and Technology** – Chennai, India Aug 2020 – May 2024
B.Tech in Computer Science and Engineering with Spl. in Big Data Analytics

- **Open-Electives:** Machine Learning I & II, Deep Learning, Streaming Analytics, Business Intelligence
- **GPA:** 9.07/10

## Experience

**Machine Learning Intern** – AIcan Automate Pvt. Ltd – Remote, India Nov 2022 – Jan 2023

- Trained in ML workflows, EDA, feature engineering, and model evaluation over 3 months..
- Built and optimized an ANN model on chocolate ratings dataset, achieving 97.5% regression accuracy.
- Conducted data cleaning and visualization to extract key trends and improve model inputs.

## Projects

**Credit Card Fraud Detection using BiLSTM and VAE-GAN Oversampling**

- Built a model combining BiLSTM (temporal learning) and VAE-GAN (oversampling) for anomaly detection.
- Achieved 93.2% F1-score and 95.6% recall, outperforming XGBoost, RF baselines by 15%+.
- Dataset: 284K+ transactions with <0.2% fraud rate..
- **Tools:** Python, BiLSTM, VAE-GAN, Ensemble Models, TensorFlow, Sklearn, Pandas, Matplotlib

**AI-Powered Skin Cancer Detection & Medical Report Generation**

- Developed an end-to-end diagnostic system using ResNet + Gemini API for lesion classification and medical report generation.
- Achieved 91% test accuracy on ISIC dataset (25K+ images)..
- Built with Flask, MySQL, REST APIs; includes auth and session management for user access.
- **Tools:** Python, Flask, ResNet, OpenCV, Gemini API, MySQL, SQLite, REST APIs

## Technical Skills

**Programming Languages:** Python, C++, Rust, SQL, Javascript, HTML/CSS, Bash

**Deep Learning Frameworks:** TensorFlow, PyTorch, Keras

**Web & Deployment:** React, Nextjs, Vite, Flask, Streamlit, FastAPI, Git, Docker, Rest APIs

**Cloud & DevOps:** AWS, GCP, Kubernetes, DigitalOcean, Github Actions

**Databases & Vectors:** MySQL, PostgreSQL, MongoDB, Redis, Pinecone

**Python Libraries:** NumPy, Pandas, Scikit-learn, Pydantic, OpenCV, NLTK

**AI Tools & Frameworks:** LangChain Ecosystem, HuggingFace, OpenAI, Anthropic, MCP, Gemini, Github Copilot