

Gokul B

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Proficient in Python(Pandas, Numpy), and SQL with expertise in Machine Learning(Scikit-learn), Deep Learning(Pytorch), Natural Language Processing(SpaCy, NLTK), Generative AI and Agentic AI.

Key Skills

Programming Languages: SQL(Structured Query Language), Python (Pandas, NumPy)

Machine Learning & AI: Machine Learning, Deep Learning, NLP, Computer Vision, Generative AI, LLMs, RAG, HuggingFace

Libraries & Frameworks: Scikit learn, PyTorch, NLTK, SpaCy, Seaborn, Matplotlib, LangChain, LangGraph, ChromaDB

Tools & Platforms: Streamlit, FastAPI, AWS SageMaker, Jupyter Notebook, VS Code, PyCharm, GitHub, MLOps

Professional Experience

Feynn Labs

Machine Learning Intern (Internship)

Remote

Nov 2024 - Jan 2025

- Executed customer segmentation analysis in the EV market using KMeans clustering and statistical analysis, enabling targeted marketing strategies that increased qualified lead generation by 30%.
- Architected an automated EDA pipeline using Python and Pandas, slashing data preprocessing time by 75% (2 hours to 30 mins) and accelerating project kickoff cycles.
- Curated and structured over 50 AI and machine learning resources into defined learning paths, improving onboarding efficiency and accelerating team readiness.

Projects

College Website RAG Chatbot

[Python / LangChain / Groq LLaMA-3 / ChromaDB / HuggingFace]

[Project Link](#)

Dec 2025 - Jan 2025

- Engineered a production-grade Retrieval Augmented Generation chatbot using LangChain and ChromaDB, ingesting college websites to deliver grounded answers with 95% accuracy across 100 plus user queries.
- Designed a persistent ingestion and retrieval pipeline with recursive chunking and top-k semantic search, improving answer precision above 90 percent while reducing hallucination rate by 40% through prompt-guided grounding.
- Integrated Groq-hosted LLaMA-3.3-70B with source attribution and vector normalization, increasing retrieval depth, response stability, and factual correctness consistently under real-world queries.

CNN Based Defect Detection for Manufacturing

[Deep Learning / Python]

[Project Link](#)

Jan 2025 - Feb 2025

- Developed a computer vision model for vehicle damage detection using CNN architectures, improving model accuracy from 57% to 80% through EfficientNet, ResNet, and Optuna based tuning.
- Expanded dataset size by 35% (3,000 to 4,750 images) using targeted data augmentation, strengthening model generalization.
- Built and deployed a FastAPI-based real time inference service for object detection, enabling API driven predictions that reduced manual inspection effort by 60% and shortened dataset preparation time from 3 hours to 1 hour.

Real Time Credit Risk Analysis and Decision Making

[Machine Learning / Python]

[Project Link](#)

Nov 2024 - Dec 2024

- Formulated and optimized a credit risk prediction model using Logistic Regression, achieving over 90% Recall by addressing class imbalance and applying hyperparameter tuning and cross validation techniques.
- Performed feature selection using correlation analysis and Information Value (IV) to eliminate redundant variables, improve model stability, and enhance predictive performance.
- Released a real time decision system processing 100+ predictions per session, reducing manual review effort by 40 percent and improving analyst efficiency.

Education

Vels Institute of Science, Technology and Advanced Studies

Bachelor of Technology - Artificial Intelligence and Machine Learning

CGPA: 7.82

Chennai

Aug 2022 - May 2026

Certifications

IBM Data Science Professional Certificate - Coursera

[Certification Link](#)

Deep Learning: Beginner to Advanced - Codebasics

[Certification Link](#)

Machine Learning A-Z - Udemy

[Certification Link](#)

Statistics for Data Science and Business Analysis - Udemy

[Certification Link](#)