

VIVEK GIRI

Machine Learning Engineer

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Machine Learning Engineer with 18+ months in fintech operations, building scalable AI solutions and end-to-end ML pipelines achieving 92% ROC-AUC in fraud detection. Proficient in Python, TensorFlow, NLP, and generative AI with expertise in model optimization and API integration.

Work Experience

KYC Analyst Apr 2024 - Present
Khatabook | bangalore

- Maintained high data integrity across verification pipelines with 99.5% accuracy, ensuring compliance with KYC regulations and audit readiness standards
- Analyzed case trends and optimized workflows using SQL and Excel, processing 5000+ records monthly to identify inefficiencies and improve operational throughput by 25%
- Collaborated with engineering teams to improve ID verification APIs, providing business requirements and user feedback that enhanced system reliability by 20%
- Flagged 150+ fraudulent applications monthly through pattern recognition and systematic data analysis, protecting company assets and maintaining regulatory compliance

CRM Executive Jul 2023 - Apr 2024
Home Credit | bangalore

- Managed customer relationships for 200+ daily interactions, achieving 120% of sales targets consistently while maintaining 95% customer satisfaction scores
- Utilized consultative selling and data-driven insights to influence customer decisions, resulting in 30% increase in service adoption rates
- Adapted to regular product updates and trained team members on new service offerings, improving team performance by 15%
- Analyzed customer feedback data to identify trends and opportunities, contributing to product improvement initiatives

Projects

Credit Risk Scoring Model – Advanced ML & Feature Engineering Present

- Performed comprehensive Exploratory Data Analysis (EDA) on financial and behavioral data, identifying key risk indicators including credit utilization patterns, transaction velocity, and payment history correlations
- Created 20+ engineered features including transaction ratios, rolling averages, utilization trends, and spending patterns using domain expertise, improving model predictive power by 15% and reducing feature noise
- Applied SMOTE and cost-sensitive learning to handle class imbalance (default rate 8%), improving high-risk customer recall by 22% and reducing misclassification costs by \$50K annually
- Conducted rigorous hyperparameter tuning using GridSearchCV and 5-fold cross-validation, optimizing precision-recall trade-off and reducing false positives by 18% in production deployment

AI-Powered Brochure Generator – LangChain & GPT Integration

Present

- Developed AI brochure generator using GPT-4 and LangChain, automating company brochure creation with 95% content relevance and 1.2s generation time
- Integrated LangChain for dynamic prompt chaining and multi-step content generation, enabling structured output with consistent formatting across 500+ generated brochures
- Developed prompt engineering framework with few-shot learning and context management, achieving 90% reduction in post-generation editing requirements
- Validated output quality using automated testing suite and manual review process, ensuring brand consistency and factual accuracy across all generated content

Multi-Model AI Text-to-Speech And Video Agent – Streamlit Production App

Present

- Engineered flexible API orchestration system with dynamic model selection, supporting 7 text enhancement modes (script, narration, podcast, story, professional) and 14+ voice options across multiple TTS providers
- Designed responsive UI with glassmorphism effects, animated gradients, and custom CSS, achieving 95% user satisfaction and 100% mobile compatibility across devices
- Deployed end-to-end AI pipeline with LLM text enhancement followed by automated audio/video generation, reducing content creation time from 2+ hours to under 30 seconds (98% efficiency gain)

Core Skills

ML/AI Frameworks: python, TensorFlow, Keras, XGBoost, Neural Networks, PyTorch, LightGBM, Random Forest, SVM, Scikit-learn, Deep learning

NLP & LLMs: NLP, BERT, Claude, Gemini, LLaMA, DeepSeek, LangChain, GPT-4, NLTK, Text Classification, Hugging Face, Prompt Engineering, RAG (Retrieval-Augmented Generation), GPT-3.5, TF-IDF

Data & Databases: Data Visualization, Pandas, NumPy, SQL, PostgreSQL, MySQL, Data Preprocessing, ETL, Feature Engineering

Development Tools: Git, Jupyter Notebook, VS Code, PyCharm, Anaconda, Streamlit, Gradio, Docker

Cloud & APIs: AWS S3, AWS SageMaker, REST APIs, API Integration, Google Cloud Platform (GCP)

MLOps & Deployment: Pipeline Automation, A/B Testing, Model Monitoring, CI/CD, MLOps, Model Deployment

Data Visualization: Data Storytelling, Plotly, Matplotlib, Seaborn

Education

BB College

May 2016 - Jul 2019

Bachelor of Business Administration (BBA)

GPA: 8.5

Certificates

LLM Engineering: Master AI, Large Language Models & Agents
Udemy

Applied Data Science with Python
University of Michigan (Coursera)

The Complete SQL Bootcamp

Jose Portilla (Udemy)

Python for Data Science and ML

Jose Portilla (Udemy)