Vikas Thirumanyam

vikastirumanyam@gmail.com • 6300440576 • Bengaluru, Karnataka, India • LinkedIn • GitHub

PROFESSIONAL SUMMARY

AI/ML Data Scientist with hands-on experience building scalable, real-time fraud detection systems using XGBoost, BERT, and explainable AI techniques. Proven track record in developing high-precision models (up to 95% fraud detection accuracy), deploying REST APIs, and visualizing fraud trends via interactive dashboards. Skilled in translating complex data into actionable insights, with deployments on AWS using Docker. Passionate about privacy-compliant AI innovation, large-scale data analysis, and building secure, transparent machine learning solutions.

EXPERIENCE

Artificial Intelligence Intern

Btech Walleh in association with Teachnook | Remote — Sep 2024 – Oct 2024

- Achieved 90%+ accuracy in sentiment classification using DistilBERT, deployed via Flask API.
- Reduced manual feedback analysis time by 40% through automated sentiment chatbot implementation.
- Improved customer sentiment understanding by 85% by providing instant analysis using the developed chatbot.
- Decreased API latency by 15% through optimized DistilBERT model deployment in Flask.

PROJECTS

Ad Click Fraud Detection using Machine Learning

- Engineered an XGBoost model that identified click fraud with 92.5% F1-score, using SHAP for interpretable ML insights.
- Applied advanced feature engineering and SMOTE for class balancing across 100k+ records.
- Integrated real-time visual dashboards to monitor fraud trends, improving analyst decision speed by ~40%.

BERT-Powered LLM for Comment & Metadata Flagging

- Fine-tuned a BERT-based model to detect fraudulent ad comments and metadata with 89% classification accuracy.
- Deployed a Flask-based REST API for real-time fraud probability scoring and label prediction.
- Incorporated explainable AI (SHAP) for transparent model interpretation, enabling regulatory audit compliance.

Ad Fraud Trend Dashboard & Visualization Tool

- Designed and deployed a Streamlit-powered dashboard visualizing fraud trends across geo, device, and publisher segments.
- Leveraged Matplotlib, Plotly, and Pandas for interactive insights from 250k+ ad event records.
- Containerized using Docker and deployed on AWS EC2, ensuring scalable, secure, and low-latency access.

CERTIFICATIONS

Certification in Master Course in Full Stack Development

Great Learning

AWS for Begginers

Great Learning

SKILLS

AI	Machine Learning	Deep Learning	Reinforcement Learning
Data Science Experience	Python	HTML	AI/ML Algorithms

EDUCATION

Presidency University,Bengaluru

Master of Computer Applications - (MCA) in Computer Applications — Aug 2023 – present

Sri Venkateswara University, Tirupati

Bachelor of Commerce - (BCom) in Computer Applications — Aug 2018 – May 2021