

SRIKAR VAKA

 GitHub  LinkedIn  Portfolio  Email

PROFESSIONAL SUMMARY

AI Engineer and Full Stack Developer specializing in Artificial Intelligence, Machine Learning, Deep Learning, and Natural Language Processing. Experienced in predictive modeling, neural networks, data analysis, and cloud deployment. Published IEEE researcher with expertise in Python, TensorFlow, PyTorch, Scikit-learn, and XGBoost. Skilled in building scalable AI solutions, modern web applications, and real-time data-driven platforms.

EDUCATION

SRM Institute of Science and Technology

B.Tech Computer Science Engineering (AI & ML)

June 2021 – June 2025

CGPA: 8.5/10

PUBLICATIONS

Hybrid Model for Cryptocurrency Price Prediction

IEEE Explore, 2024

- Developed ensemble hybrid model integrating LSTM, BiLSTM, XGBoost for cryptocurrency price forecasting. Improved accuracy and robustness for financial market predictions. Leveraged time-series analysis, ensemble learning, and advanced neural networks to outperform traditional financial forecasting methods. Demonstrated significant improvements in prediction precision, providing practical value for quantitative finance, algorithmic trading, and financial analytics.

Assessment of Data Augmentation Paradigms in Pathology Identification

IEEE Explore, 2024

- Systematically evaluated data augmentation techniques—including RENN, Random UnderSampling (RUS), Near Miss, SVM, Borderline and Simple SMOTE—on imbalanced medical datasets (heart, cancer) for pathology detection. Compared deep learning models: Artificial Neural Networks (ANN), LSTM, and GRU for classification performance post-augmentation. Highlighted the role of advanced sampling methods in improving disease diagnosis accuracy through preprocessing and model optimization..

PROJECTS

Crypto Vertex AI

[Link](#) 

- Developed a full-stack AI solution for cryptocurrency price prediction with an interactive, responsive web UI using Next.js, TailwindCSS, and Recharts. Designed and deployed backend using FastAPI and Python, integrating advanced machine learning models: LSTM, BiLSTM, XGBoost, and ensemble techniques for robust multi-asset forecasting (BTC, ETH, SOL, ADA, DOGE). Engineered real-time visualizations, live market tickers, and built-in news aggregation with AI-powered sentiment and statistical analysis (MACD, RSI, moving averages).
- Tech Stack:** Python, TensorFlow, PyTorch, XGBoost, Matplotlib

MindCare AI

[Link](#) 

- Designed, developed, and deployed a comprehensive mental health and personal productivity platform with an AI-powered chatbot, digital journaling, mood analytics, and advanced productivity tools. Engineered AI-driven conversation modules in React 18 enabling personalized mental health support, privacy-focused interaction, and 24/7 availability. Built a secure digital journal for daily reflection, mood tracking, and auto-analytics, featuring advanced data visualization and personal insights.
- Tech Stack:** React, TypeScript, Python, NLP

SKILLS

Languages: Python, JavaScript, TypeScript, SQL, C++

AI/ML: Machine Learning, Deep Learning, NLP, Computer Vision, TensorFlow, PyTorch, Scikit-learn, XGBoost

Web Development: React, Node.js, Streamlit, REST APIs

Tools: Git, Docker, AWS, Google Cloud, VS Code, GitHub Copilot

Other: Prompt Engineering, Vibe Coding

CERTIFICATIONS

- Generative AI** – OutSkill
- AI Specialist** – Salesforce
- Prompt Engineering & Programming with OpenAI** – Columbia University
- AI Associate** – Salesforce
- GitHub Foundations** – GitHub