Bhavani Shankar Sasank Mukkamala

209-630-7477 | sasankmukkamala2303@gmail.com | linkedin.com/in/sasank-mukkamala | sasankmukkamala.com

Summary

AI/ML Engineer with hands-on experience in LLM fine-tuning, RLHF, and deploying scalable NLP solutions, focused on building reliable, real-world AI systems with minimal hallucination.

Education

California State University, Los Angeles May 2025
Master of Science in Computer Science (GPA: 3.94 / 4.00) (Dean's List – Top 10%) *Los Angeles, CA*

Gandhi Institute of Technology and Management, Hyderabad, India June 2023
Bachelor of Technology in Computer Science and Engineering (GPA: 3.97 / 4.00) *Hyderabad, India*

Work Experience

California State University, Los Angeles, CA Oct 2023 – Present
Graduate Student Assistant (Assistant Lab Consultant)

- Enhanced lab efficiency by reducing downtime 30% through swift resolution of 100+ hardware, software, and network issues.
- Improved user satisfaction (95% rating) by managing 50+ monthly ServiceNow tickets, providing timely and effective solutions.
- Supported IT services for 500+ users, troubleshooting issues related to campus applications like Zoom, Teams, and Canvas.

Phoenix Global, Hyderabad, India Apr 2022 – July 2022
Machine Learning Engineer Intern

- Fine-tuned NLP models for sentiment analysis, boosting accuracy by 25% using Scikit-Learn and TensorFlow.
- Designed real-time Twitter sentiment analysis pipelines, improving data processing efficiency by 30%.
- Optimized deep learning-based embeddings, reducing training time by 15% for large-scale data.

Defence Research and Development Organisation, Hyderabad, India May 2021 – Aug 2021
Software Developer Intern

- Engineered Python-based middleware for data processing, cutting conversion time by 60%.
- Developed a GUI-driven ML-powered data validation tool, reducing manual effort by 60%.
- Conducted rigorous testing, achieving 100% accuracy in data conversion and handling datasets with over 1 million records.

Technical Skills

Machine Learning & AI: LLM Fine-Tuning, Reinforcement Learning (RLHF), Deep Learning, NLP, Multi-Modal Models
Frameworks & Tools: PyTorch, TensorFlow, Transformers, Scikit-Learn, NumPy, Pandas, OpenCV
Deployment & Optimization: Model Deployment, CUDA, Docker, AWS (EC2, S3), Google Cloud Platform
Programming Languages: Python, Java, C++, JavaScript, TypeScript, Dart
Database & Backend: MongoDB, PostgreSQL, MySQL, Express.js
Tools: Git, Jira, ServiceNow, LaTeX

Projects

AI Medical Chatbot | ***LangChain, Hugging Face, Streamlit, FAISS*** | **github.com** Nov 2024

- Developed an AI-driven medical chatbot, leveraging LLM fine-tuning and RLHF techniques to improve response reliability.
- Implemented vectorized search for EHR documents, reducing query response time by 50%.
- Deployed a real-time chatbot with optimized embeddings to ensure minimal hallucination in generated content.

NeuralArt AI | ***React.js, Node.js, Express.js, MongoDB, Hugging Face API*** | **github.com** Mar 2024

- Developed a full-stack web application enabling users to generate and share AI-powered art using the Stable Diffusion model.
- Implemented secure user authentication with JWT and managed image storage with Cloudinary.
- Deployed the application on Vercel and Render, ensuring a seamless user experience across devices.

Facial Emotion Recognition System | ***Python, TensorFlow, OpenCV, Keras*** | **github.com** Jun 2024

- Built a real-time CNN-based facial emotion detection system, achieving 85% accuracy on FER-2013.
- Integrated OpenCV and TensorFlow for multi-modal data processing, enabling 15 FPS real-time detection.

Cryptocurrency Price Predictor | ***Python, Flask, TensorFlow/Keras, yfinance*** | **github.com** Mar 2024

- Designed an LSTM-based predictive model, achieving 80% accuracy on financial time-series data.
- Optimized data pipelines with Scikit-Learn, enhancing model training efficiency by 25%.

Certifications

- **Programming in Python**, META, 2024
- **Machine Learning**, University of Washington, 2024
- **Neural Networks and Deep Learning**, DeepLearning.AI, 2022
- **MongoDB Node.Js Developer Path**, MongoDB, 2023