

Shivasai Krishna Goud Bathini

New York, US | shbathin@my.bridgeport.edu | 913-203-5323 | LinkedIn:Shiva Sai Krishna

GitHub: Shivasaikrishna-bathini

Professional Summary

Generative AI Engineer with over three years of applied experience designing, building, and deploying large language models. Skilled in prompt engineering model fine-tuning and leveraging frameworks such as Hugging Face Transformers, TensorFlow, and PyTorch. Delivered high-performance, production-scale GenAI models for manufacturing and supply chain applications. Contributed to cross-functional digital transformation strategies leveraging AI, ML, and cloud platforms (AWS, Azure, GCP) with strong expertise in Python, JavaScript, containerization (Docker, Kubernetes), and CI/CD pipelines. Proven ability to improve pipeline efficiency by 45%, enhance user experience, and optimize real-time data processing through advanced debugging and pipeline optimization. Currently focused on delivering high-performance, production-scale GenAI models for manufacturing and supply chain applications.

Projects/Applied Experience

Cognitive HOI Reasoning – Research Project

Apr 2023 – Mar 2024

- Investigated human-object interaction models on **Bongard-HOI** and **HAKE datasets**, identifying reasoning gaps between synthetic and real-world image understanding.
- Applied **DVRL** and **Componential Analysis**, raising model accuracy from 55% to 80%.
- Contributed novel insights into bridging cognitive paradigms in computer vision.

Personal Attorney – Legal RAG Assistant

Apr 2024 – Nov 2024

- Built a **Retrieval-Augmented Generation (RAG)** system to provide state-specific DMV/legal information, reducing expensive LLM retraining costs.
- Implemented with **ChromaDB**, **LangChain**, **FastAPI**, **DeepSeek 8B (LoRA fine-tuning)**, enabling scalable updates without retraining.
- Delivered practical support for immigrants navigating complex legal frameworks.

SmartMed AI – Pill Detection App

Jan 2025 – Aug 2025

- Developed a computer vision pipeline using **YOLO (v5–v12)**, multi-scale detection, attention modules, and frame-to-frame tracking to handle overlapping pills.
- Deployed solution for pharmacies, improving operational accuracy and reliability in pill recognition tasks.
- Tech Stack: **PyTorch**, **OpenCV**, **ResNet**, **FastAPI**, **AWS**.

Time-Series Forecasting – Stock Market Analysis

Sep 2025 – Running

- Designed forecasting models for volatile financial time-series data.
- Compared traditional **ARIMA/SARIMA** with advanced methods like **Meta’s Prophet** and **XGBoost ensembles**.
- Improved accuracy in predicting market fluctuations under high volatility conditions.

Technologies

Programming Languages: Python | Java | R | TensorFlow | PyTorch | Keras | Scikit-learn | Hugging Face Transformers | Pandas | NumPy | OpenAI API | SQL

Machine Learning & AI: Generative AI | Large Language Models | GPT | LLaMA | Falcon | LangChain | Hugging Face Transformers | Deep Learning | Neural Networks | Machine Learning | NLP | Text Generation | Sentiment Analysis | Named Entity Recognition | Retrieval-Augmented Generation | Synthetic Data Generation | Model Fine-Tuning | Model Optimization | Bias Control | Ethical AI

Cloud & Deployment: AWS | AWS Bedrock | Azure | Azure OpenAI | Google Cloud | Vertex AI | MLOps | Docker | Kubernetes | CI/CD | Serverless | API | Cloud Deployment | Microservices

Strengths & Tools: Git | GitHub | Postman | PyCharm IDE | ITSM Tools | Problem Solving | Debugging | Clean

Code | Object-Oriented Programming | Design Patterns | Collaboration | Communication | Attention to Detail | FASTAPI | Version Control

Education

University of Bridgeport, M.S. in Computer Science Aug 2023 – Dec 2025

- Focus on Artificial Intelligence, Full-Stack Development, and Cloud Computing
- Relevant Coursework: Advanced Machine Learning, Cloud Computing, Software Engineering

Jawaharlal Nehru Technological University Hyderabad (JNTUH), B.Tech in Computer Science Jun 2019 – Jun 2023

- Completed coursework in Data Structures, Algorithms, Operating Systems, and Databases
- Academic Projects: Weed Detection system

Experience

Cloud Support Technician (IT Department), University of Bridgeport – Bridgeport, CT Jan 2024 – Present

- Resolved IT support tickets related to software, networking, and hardware issues for students and staff through a centralized service desk system.
- Managed and updated records in the cloud-connected student information system (Ellucian Colleague DB), supporting account provisioning, course registration, and data consistency checks.
- Troubleshoot connectivity and authentication issues involving cloud storage platforms (Google Drive, OneDrive), VPN access, and virtual desktops.
- Collaborated with infrastructure and systems teams to escalate and resolve complex database, access control, and application deployment issues.
- Gained operational experience with ITSM tools and enterprise database platforms in a hybrid cloud environment.