SAMHITHA

Artificial Intelligence Enthusiast

github.com/Samhitha-07

Education

Amrita Vishwa Vidyapeetham

Bachelor of Technology in Artificial Intelligence

Sep. 2022 - June 2026 CGPA - 7.64

SSVM World School

Mar. 2018 - June 2022

Coimbatore, TamilNadu

SSLC - 96 percent, HSC - 91 percent

Projects

Commusync: A community forum | HTML, CSS, Flask, Node.js, Firebase, Azure

November 2024

- Developed a dynamic webpage that focuses on trending discussions and social buzz with a responsive UI using HTML, CSS, and Node.js, providing an engaging user experience.
- Integrated Firebase Google Authentication for secure user login and Azure PostgreSQL for efficient data storage and management.
- Implemented robust backend functionality with Flask, incorporating Azure Content Safety to filter inappropriate content.

Auto-ML: Data Visualizer | Python, Streamlit, Plotly, Scikit-learn

March 2024

- Built an interactive web application for automating data visualization and analysis, leveraging Streamlit for UI and **Plotly** for dynamic, interactive plots.
- Incorporated Scikit-learn for implementing machine learning algorithms, enabling predictive insights and pattern recognition.
- The tool streamlines data cleaning, feature extraction, and exploratory analysis, supporting diverse data inputs for comprehensive dataset exploration.

Persona AI: Context-Aware RAG Chatbot | Python, Streamlit, LangChain, Ollama, Chroma DB, Cross Encoder April 2025

- Developed **personaAI**, a document-grounded chatbot using Retrieval-Augmented Generation (RAG) to generate structured, in-depth answers based on uploaded PDFs.
- Integrated LangChain, Ollama, and ChromaDB for context retrieval, with CrossEncoder re-ranking to improve relevance.
- Designed an interactive Streamlit interface supporting file upload, document chunking, embedding, and llama3.2-based query response.

Publications

Samhitha S, Srichandra I.V, Harish Vijay, Giri Prasath, and Navaneeth Haridasan, "Comparative Analysis of MLP and KAN Models for Solving Inverse Kinematics of a 3-R Manipulator", accepted for presentation at the 3rd International Conference on Robotics, Control, Automation, and Artificial Intelligence (RCAAI 2024), MIT Manipal.

Leadership / Extracurricular

ISTE Workshop Host

March 2023

Lead Volunteer

Conducted a workshop on Arduino and Raspberry Pi.

Amrita Vishwavidyapeetham

ML BOOTCAMP

November 2023

Co-Lead

Amrita Vishwavidyapeetham

Conducted a Bootcamp on Machine learning, Deep Learning, LLM and MLOPS.

Technical Skills

Languages: Python, Java, C, HTML, CSS, JavaScript, SQL

Frameworks: Machine Learning, Deep Learning, React, Node, Streamlit, Pytorch, Generative AI, OpenCV, Roboflow,

SciPy, Linux, MySQL, Azure, Firebase

Certifications & Workshops

Google GEN-AI Specialization

Infosys Foundation of AI Course

ISTE Workshop on Embedded System Design using Arduino