Kruthika L

kruthikal0705@gmail.com|+91 9880428668 |LinkedIn |GitHub

OBJECTIVE

Aspiring Computer Science Engineer with a strong focus on Machine Learning and Generative AI, combining solid Python programming skills with a deep interest in neural networks and model deployment. Motivated to drive innovation through real-world AI solutions while continuously learning and exploring emerging technologies.

EDUCATION

JSS Academy of Technical Education , Bengaluru(2022-2026)

Bachelor of Engineering, Computer Science – **9.1 CGPA**

Surana Independent PU College , Bengaluru(2020-2022)

PCMB – **97.5%**

SJR Kengeri Public School,Bengaluru (2007-2020)

ICSE-92.5%

SKILLS

Programming Languages: Python, Java, HTML, CSS, JavaScript.

Frameworks and Libraries: Flask, Streamlit, TensorFlow, PyTorch, Scikit learn, Matplotlib, Seaborn, NumPy, Pandas, API Integration(Google Gemini API).

Platforms: Jupyter Notebook, Google Colab, Visual Studio Code.

Soft Skills: Problem-solving, Teamwork, Analytical Thinking, Time Management, Fast Learner, Communication, decision making, leadership.

PROJECTS

Deep Learning-Based Neurological Disorder Prediction

Developed a deep learning model to predict neurological disorders using medical imaging datasets. Leveraged CNN architectures and Transfer Learning techniques, including VGG-16, GoogleNet, and ResNet, to improve classification accuracy. Applied Grad-CAM visualization techniques to enhance model interpretability, ensuring better validation and reliability of predictions for real-world medical applications.

AI-Powered Carbon Footprint Tracker

Developed a web application that tracks carbon footprints and provides AI-driven recommendations to reduce emissions. The system integrates real-time emission calculations and an interactive dashboard for visualizing data trends. Leveraging React.js for the frontend and TensorFlow for AI-based analysis, the application ensures scalability and user-friendly accessibility**.**

Food Wastage Management System in Retail Using Machine Learning

Developed a machine learning model utilizing Random Forest Classifier and Random Forest Regressor to predict food wastage through demand forecasting and dynamic pricing strategies. Designed an AI-driven system to recommend discounts or donate excess food to the nearest food banks, optimizing inventory management and reducing waste in retail industries.

AI-Powered Air Quality Improvement System

Developed a smart air quality monitoring and enhancement system using AI-driven analysis. The system integrates IoT sensors (MQ135, ESP8266) to collect real-time environmental data and applies AI models to predict the Air Quality Index (AQI) while detecting anomalies in pollution levels. By leveraging deep learning techniques, this project helps in air quality management and supports environmental sustainability efforts.

Human Cognitive & Emotional State Monitoring System using AI

Designed an AI-driven approach for real-time emotion and cognition monitoring through physiological signal fusion and time-series modeling. Developed a multi-modal ML model using Random Forest, ARIMA, and Computer Vision techniques to predict cognitive and emotional states from EEG, heart rate, and facial data.

CERTIFICATIONS

- AI and Machine Learning Full Course – IBM Skillsbuild
- Design and Analysis of Algorithms – IIT Madras(NPTEL)
- Strategy Formulation and Data Visualization – IIT Madras
- Programming in Java- IIT Kharagpur (NPTEL)
- Introduction to Internet of things-IIT Kharagpur(NPTEL)
- PwC Switzerland Power BI Job Simulation-Forage

ADDITIONAL INFORMATION

- Participated in various hackathons, showcasing AI-driven solutions and innovative problem-solving approaches.
- Submitted a research paper titled 'CNN-Based Neurological Disorder Prediction' to IEEE Conference (under review).
- Winner – Web Wizards Website Design Competition, JSSATE
  Designed and developed an innovative, responsive website using HTML, CSS, and JavaScript, earning top recognition for creativity, user experience, and technical execution.
- Participated in Workshop on “GenAI and its Applications” held during 15-16 November, 2024 organized by Department of Computer Science and Engineering, JSSATE, Bengaluru.
- Interests: Hackathons, AI research, sustainable tech, futuristic innovations, reading and travel.