Kotha Venkata Satya Pranay

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GitHub Profile
LinkedIn Profile

Vellore Institute of Technology, Amaravathi

Education

•VIT - AP University *2021-2025*
Bachelor of Technology in Computer Science and Engineering CGPA: 9.19

Technical Skills and Interests

- **Programming Languages:** Java, Python, JavaScript, PHP
- **Databases:** MySQL, MongoDB
- **Machine Learning & Deep Learning:** TensorFlow, Scikit-learn, Keras, XGBoost
- **Data Analysis & Visualization:** Pandas, NumPy, Matplotlib, Seaborn, Plotly
- **Tools Used:** VS Code, GitHub, Jupyter Notebook, Streamlit, MySQL Workbench
- **Coursework:** Foundations of Data Analytics, Artificial Intelligence, Design and Analysis of Algorithms, Data Structures & Algorithms, Object-Oriented Programming, Database Management Systems, Machine Learning
- **Interests:** Web Development, Data Science, Data Analysis
- **Coding Profiles:** LeetCode (Rating : 1536), Geeks for Geeks (Rating: 1352), CodeChef (Rating: 1300)

Personal Projects

•Weather Classification

– Developed and trained deep learning models, including a VGG16-based transfer learning model (98% accuracy) and CNN (94% accuracy), classifying weather conditions such as sunny, cloudy, rainy, and snowy.
– Built a web interface with HTML, CSS, and Flask, enabling users to upload images and receive weather classification results in under 2 seconds per image.
– **Technologies Used:** VGG16, CNN, HTML, CSS, Flask

•Medical Insurance Estimator

– Built a Medical Insurance Finder to estimate insurance costs based on inputs like age, sex, BMI, and smoking status. Achieved a Mean Absolute Error (MAE) of 5000, with Support Vector Regression (SVR) delivering the best performance among evaluated models.
– Designed an interactive web interface using Streamlit and custom CSS, facilitating seamless user interaction and efficient model deployment. The platform attracted over 500 users within the first month.
– **Technologies Used:** SVM, Random Forest, Linear Regression, Decision Tree Regressor, Streamlit, CSS

•Bus Reservation System

– Designed an interactive web-based platform enabling users to search routes, view schedules, and book seats, simplifying bus ticket management for users and administrators, resulting in a 30% reduction in booking time.
– Implemented a responsive, user-friendly interface to enhance booking efficiency, leading to a 20% increase in user satisfaction and engagement.
– **Technologies Used:** HTML, CSS, JavaScript, PHP

•Olympic Data Analysis Project

– Analyzed data from 200+ countries and 11,000+ athletes, highlighting medal tallies, top nations (USA, Russia), standout athletes (Michael Phelps, Usain Bolt), and dominant sports from 1900 to 2016.
– Conducted gender analysis revealing a rise in female participation from 2.2% in 1900 to 45% in 2016, showcasing improved gender balance throughout Olympic history.
– **Technologies Used:** Python, NumPy, Pandas, Streamlit, CSS

Achievements

– Secured **1st Position** in the VIT-AURA Codeathon organized by the Placement Department of VIT–AP University.
– Secured **1st Position** in the CSI's "Snakes and Coders" Codeathon at VIT–AP University.
– Secured **3rd Position** in VIT–AP University's TechSprint Hackathon by presenting a performance-enhancement solution for IPL teams, offering strategic insights for analysts and fitness coaches.

Certifications

– SmartInternz – Applications of Artificial Intelligence and Machine Learning with Applied Data Science.
– Board Infinity – Data Structures and Algorithms.