



VALLURI RACHANA

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Projects

Virtual Sign Language Translator

Developed a real-time translator using OpenCV and LSTM that recognizes Indian Sign Language gestures from live camera input and converts them into text with high accuracy.

Plastic Reuse Suggestion AI

Built an AI-based web app using Flask and TensorFlow that classifies plastic items via CNN and OpenCV, identifies recyclability, and suggests creative reuse ideas to promote sustainability.

Women Safety Alert Network

Developed a safety alert app using Flask, GPS, and Twilio API that sends real-time location and a 5-second audio clip to nearby police stations when a distress button is pressed.

Email Classification System

Built an AI model using Scikit-learn and NLP techniques to classify emails as spam or legitimate, and deployed it via Flask for real-time prediction.

Cat vs Dog Image Classification

Developed a deep learning model using TensorFlow and OpenCV to classify cat and dog images with 95% accuracy, optimized using data augmentation and regularization

Research Papers

Ethical Challenges and Bias in Generative AI Systems

Researched how large language models such as ChatGPT and Gemini can unintentionally reflect social or algorithmic bias, and analyzed fairness frameworks to mitigate ethical concerns and enhance responsible AI development.

Impact of AI on Employment: Automation VS Human Augmentation.

Education

Bachelor of Technology (B.Tech) in Artificial Intelligence and Machine Learning (AIML)

2023 – 2027

SR university - warangal, India

8.1 CGPA

Pursuing a degree focused on Artificial Intelligence, Machine Learning, Actively engaged in AI-driven projects, research, and hackathons, applying technical knowledge to solve real-world problems.

Certifications

Data Preprocessing – Future Skills Prime

Focused on data cleaning, transformation, and feature engineering techniques essential for building accurate and efficient machine learning models.

Introduction to Cybersecurity – Cisco Networking Academy

Learned the fundamentals of cybersecurity, including threat detection, data protection, and safe digital practices for secure software environments.

About Me

I am a third-year Computer Science and AIML student with a strong background in Data Structures, Algorithms, and Software Development. I love solving complex problems with clean and efficient code. I enjoy exploring new technologies and creating projects that combine creativity with logic. I am skilled in Java, Python, SQL, and JavaScript. My goal is to develop reliable and scalable software solutions that truly make a difference.

Skills

Programming

Languages: Java, Python, JavaScript, SQL

CORE CONCEPTS: DATA STRUCTURES & ALGORITHMS, OBJECT-ORIENTED PROGRAMMING, DATABASE MANAGEMENT

Web Technologies: HTML, CSS, Flask, REST APIs

Developer Tools: GitHub, VS Code, Jupyter Notebook

Reward

Top 3 Winner, University Hackathon – Awarded for innovative solution design.

Topper Certificate – Recognized among top-performing students.

Secretary, CSI Student Chapter

languages

English

German