Kartikey Agarwal

<u>Kartikeyeagarwal1234@gmail.com</u> •8392822445 • <u>github.com/Kval25</u> • <u>www.linkedin.com/in/kartikey8</u>

EDUCATION

VIT Bhopal University

September 2026

Bachelor of Technology in Computer Science, CGPA - 7.93

Relevant course work: Data Structures and Algorithms, Database Management Systems, Operating Systems, Web Technologies, Computer Networks, Artificial Intelligence, Object-Oriented Programming

PROFESSIONAL EXPERIENCE

Indian Space Lab

December 2024 - January 2025

Research Intern

- Researched drone technology and its applications in astronomy.
- Use UAV mechanics, propulsion, Al integration, and control systems.
- Explored drone-based celestial observations and data collection.

PROJECTS & EXTRACURRICULAR

Real Estate Website

- Developed a full-stack real estate application using Node.js, Express, and MongoDB to manage property listings and user information.
- Integrated user authentication for secure transactions.
- Emphasized responsive design using HTML, CSS, and Bootstrap for optimal user experience across devices.

Fake News Detection

https://fake-news-detection-app-b5g6luhvbetjsohlr3zub5.streamlit.app/

- Tech Stack: Python, Scikit-learn, NLTK.
- Key Skills: Text preprocessing, TF-IDF, Logistic Regression, SVM, Model Evaluation.
- Built an NLP model to classify news articles as real or fake, achieving 98% accuracy with Logistic Regression and SVM.
- Designed an end-to-end pipeline using advanced text preprocessing and feature extraction.

Real-Time Sign Language Detection System

- Key Skills: CNN, Computer Vision, Image Processing, Classification.
- Developed a real-time system to recognize ASL hand gestures from webcam video using CNNs.
- Employed MediaPipe for robust hand landmark detection and gesture preprocessing.
- Enhanced gesture prediction accuracy and response time for seamless user interaction.

SKILLS

Programming Languages: Python, C++.

Machine Learning & Al: Scikit-learn, TensorFlow, Logistic Regression, SVM, CNN.

Computer Vision & NLP: OpenCV, NLTK, Text Preprocessing, TF-IDF, Image Processing.

Development Tools: Jupyter Notebook, Streamlit (for web apps), Git/GitHub.

Other Skills: Model Evaluation, Real-Time Detection, Classification, Web Deployment.