Rudra Gupta

📞 9075569787 — ✉ kumarguptarudra15@gmail.com — 🔗 linkedin.com/in/rudra-kumar-gupta
github.com/Rudra-Gupta15 — 🌐 portfolio-two-liard-u3dpxmro0m.vercel.app — k kaggle.com/rudrakumargupta

Education

Yeshwantrao Chavan College of Engineering, Nagpur   **2022 – 2026**
Bachelor of Technology — Electronics Engineering   *CGPA: 8.42*
Honor: VLSI Design

St. Paul School, Nagpur   **2021 – 2022**
Class XII   *Percentage: 77%*

Skills

Languages	Python, Java(Basic), C/C++, HTML, CSS, SQL
Concepts	Machine Learning, Deep Learning, Data Structures & Algorithms, OOP
Tools & IDEs	VS Code, Arduino IDE, MySQL, Google Colab, Anaconda
Libraries	OpenCV, TensorFlow/Keras, Scikit-learn, Tkinter, Flask
Version Control	Git, GitHub

Projects

Sign Language Recognition System   **2025 – Present**

– Developed a real-time hand gesture recognition system using OpenCV and deep learning (CNN + YOLOv8) with prediction smoothing.

– Evaluated 3 color spaces: **RGB achieved 90% accuracy**; Greyscale ∼40%; HSV varied with lighting — RGB selected for production.

– Designed a Tkinter GUI with live video feed and sentence generation for end-to-end accessibility use.

Hyperlocal Weather Impact Prediction   **2026**   🌐 Live Site

– Built regression-based ML models to forecast weather impact metrics using real-time OpenWeatherMap API data.

– Performed feature engineering on live API feeds (temperature, humidity, wind speed, pressure) for localized predictions.

– Implemented a lightweight interface for real-time query and display of predicted weather impact scores.

Smart Device Recommendation System   **2026**

– Developed a full-stack web application to simplify electronics buying using a custom Python recommendation engine.

– Engine analyzes technical specifications (RAM, CPU, GPU) and budget constraints for tailored mobile and laptop suggestions.

– Integrated front-end UI with Python backend to deliver ranked, explainable recommendations in real time.

Internships

AIML Intern — Prevoyance IT Solutions Pvt. Ltd.   **2026 – Present**

– Worked on real-time computer vision projects including sign language recognition and violence detection systems.

– Implemented deep learning models using CNN, YOLOv8, and OpenCV achieving up to **90% live inference accuracy**.

– Assisted in dataset preprocessing, model evaluation, hyperparameter tuning, and GUI integration.

Electronics Intern — Raj Food Machine   **2021 – 2022**

– Worked on industrial food-processing machines; assisted with sensor integration, motor control, and automation logic.

– Gained hands-on exposure to electronics hardware, control panels, and industrial workflows.

Certification and Extra-Curricular

– Python 3.4.3 Training — Spoken Tutorial Project, **IIT Bombay** (June 2023, Score: 65%)

– Intel **AI For All** — AI Aware & AI Appreciate stages completed (Feb 2026, Digital India / CBSE)

– Vice President of Sponsorship — College Technical Fest **(ICON)**

– Nagpur District Level Chess Player; represented at State Level (Class 8)