

# Abhinav Singh

abhinavsingh25001@gmail.com | +91 87706 37174 | Portfolio | LinkedIn | Github

## Education

BTech in Computer Science and Engineering, <b>VIT Bhopal</b>	Sept 2022 – May 2026
12 <sup>th</sup> , <b>The Bhavans Prominent International School, Indore</b>	2022
10 <sup>th</sup> , <b>The Bhavans Prominent International School, Indore</b>	2020

## Projects

### Beru AI Personal Assistant

*Python, NLP, Speech-to-Text, Text-to-Speech, Groq, Cohere, Hugging Face, PyQt5*

- Built an AI assistant with voice recognition, real-time web search, and automated task management.
- Integrated Groq, Cohere, and Hugging Face for intelligent responses, AI-driven image generation, and multi-language support.
- Designed a modern, intuitive GUI for seamless interaction and accessibility.

### Emotion Recognition System

*Python, TensorFlow/Keras, OpenCV, CNN, Deep Learning*

- Developed a CNN-based real-time emotion recognition system using facial expressions.
- Achieved high accuracy via deep learning, dataset training, and advanced preprocessing.
- Integrated OpenCV for real-time face detection and live emotion analysis.

### Face Recognition Attendance System

*Python, OpenCV, Face Recognition, Joblib, Concurrent Processing*

- Developed an AI-powered attendance system using real-time face recognition.
- Optimized recognition accuracy with a robust training phase and multi-threading.
- Automated attendance logging in CSV format for efficient record management.

## Skills

**Languages:** Python, HTML, CSS, JavaScript, SQL

**Technologies:** Machine Learning, Cloud Computing, Data Structures, Algorithms, Software Design, Ethical Hacking

**Operating Systems:** Linux/Unix, Windows

**Tools:** Git, MATLAB, Simulink, Microsoft Office (Word, PowerPoint, Excel, etc.)

**Databases:** MongoDB, MySQL

## Extracurricular Activities

**Technical Lead**, Linpack Club, VIT Bhopal – Bhopal, Madhya Pradesh Dec 2023 – Present

- **Led the Technical Team of Linpack Club**, overseeing MATLAB-based projects, managing hackathons, and organizing multiple events to foster innovation and collaboration within the team.

## Certifications

- Cyber Security Analyst, **IBM**, Issued Apr 2025
- DevOps Fundamentals, **IBM**, Issued Apr 2025
- Complete Ethical Hacking Bootcamp, **Udemy**, Issued Dec 2024
- Machine Learning Specialization, **DeepLearning.AI, Stanford University**, Issued Jun 2024
- The Bits and Bytes of Computer Networking, **Google**, Issued Dec 2023
- Version Control, **Meta**, Issued Jun 2023