

Yash Singh

(+91) 7905749912 | yash7singh3@gmail.com | LinkedIn | GitHub

EDUCATION

VIT Bhopal University <i>B.Tech. in Computer Science and Engineering</i>	2022 – 2026 CGPA: 8.90
YMCA Centenary School & College <i>High School Graduate</i>	2021 Percentage: 84.4%
YMCA Centenary School & College <i>Secondary School Education.</i>	2019 Percentage: 91.0%

PROJECTS

Face-Matrix (Python, OpenCV, NumPy, Pandas, tkinter, customtkinter)

- Built a real-time facial recognition-based attendance system using Python and OpenCV.
- Captured and trained facial images; implemented machine learning for live recognition.
- Logged attendance data to CSV with timestamps and user IDs.
- Designed GUI with tkinter and customtkinter for ease of use and visual interaction.
- Promotes hygienic, contactless attendance suitable for classrooms and workplaces.

Intelligent Fill-Control (Python, Raspberry Pi, IoT, Ultrasonic Sensors)

- Engineered an automated water level monitoring and control system using Raspberry Pi and ultrasonic sensors.
- Implemented Python scripts to measure tank levels in real time and dynamically manage water flow via GPIO-controlled valves.
- Displayed real-time water level data using 8-segment LED display, enhancing user accessibility.
- Integrated a warning mechanism with LED indicators and buzzers for overflow and low-water alerts, improving safety and reliability.
- Optimized for smart home and industrial use cases requiring automated liquid level regulation.

TECHNICAL SKILLS

Programming Languages: C, C++, Python, Java, Shell Scripting

Web Development: HTML, CSS

Database Management: MySQL, PISql

Embedded & IoT: Raspberry Pi, Arduino, ESP32, Robotics, Automation, Sensor Integration

Tools & Platforms: Git, GitHub, VS Code, Linux, Microsoft Excel, Microsoft Word, WireShark, Kali Linux, Ubuntu

Others: Version Control, Hypervisor, Virtualization

ACHIEVEMENTS

- Solved 100+ DSA problems on LeetCode and GeeksforGeeks.
- Core member of **GeeksforGeeks Club** –managed social media & outreach.
- University chess team player; led multiple intra-college sports events.

CERTIFICATIONS AND COURSEWORK

Certifications

- Generative AI – IBM Center for Excellence
- Blockchain Essentials – IBM Center for Excellence
- Blockchain Developer – IBM Center for Excellence
- Advent of Cyber 2023 - TryHackMe

Relevant Coursework

- Data Structures & Algorithms
- Object-Oriented Programming
- Operating Systems
- Database Management Systems
- Computer Networks
- Cloud Computing