Vishesh Singhal

Hyderabad, India

vishesh.singhal@research.iiit.ac.in — 8750077076

github.com/Visheshs3 — linkedin.com/in/vishesh-singhal-1a1ab131a

Education

DAV Public School — Mar 2024
12$^{\text{th}}$ Grade

International Institute of Information Technology, Hyderabad — Jul 2024 – Jul 2028
B.Tech in Computer Science

International Institute of Information Technology, Hyderabad — Jul 2024 – Jul 2029
MS by Research in Geospatial Technology

Skills

Programming: Python (*Skillful*), C (*Skillful*), HTML/CSS/JavaScript (*Beginner*), Bash Scripting (*Beginner*)
Databases: MongoDB, MySQL (*Skillful*)
Frameworks: Flask (*Beginner*)

Courses

- Computer Programming

- Digital Systems and Microprocessors

- Intro to Software Systems

- Data Structures and Algorithms

- Intro to Internet of Things

- Intro to Spatial Sciences and Technology

Projects

Smart Irrigation System (IoT)
Built an IoT-based system using ESP32 and MQTT for automated irrigation with centralized threshold control and sensor data aggregation.

Health Monitoring System
Developed a smart wristband device using ESP32 and sensors to monitor SpO_2, temperature, and heart rate, with BLE data communication and remote alerts via Flask and Twilio.

Remote System Resource Monitoring
Created a tool to fetch and display CPU/RAM usage using ESP32, MQTT, and OM2M server, triggering alerts if thresholds are exceeded.

Achievements

- Built and hosted personal projects on GitHub and GitHub Pages.

- Participated in internal hackathons on IoT and Embedded Systems.

Languages

- English – Fluent

- Hindi – Native