SANIDHYA SAHU

Raipur, INDIA

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EDUCATION

Samrat Ashok Technological Institute	**Nov 2022 – June 2026**
*B.Tech - Internet of Things - **GPA** - 3.20 (7.5/10)*	*Vidisha, Madhya Pradesh*

COURSEWORK

- Data Structure and Algorithms (DSA)
- Python Programming
- Internet Programming
- OOPs with JAVA
- Electronic Devices
- Linux Lab (Terminal and BASH Scripting)
- C Language
- Discrete Mathematics
- Computer System Organization

TECHNICAL SKILLS

Languages: C, C++(Arduino), Java, Python, JavaScript, SQL
Technologies/Frameworks: HTML, CSS, Flask, FireBase, Streamlit, Kivy, BASH Script, Git
Developer Tools: VS Code, GitHub, Canva, PostMan

PROJECTS

Customer Management Application ↗ | JAVA, SpringBoot, Thymeleaf, HTML, and APIs

- The Customer Management Application is a **Web-Based System** developed using **Java** and **Spring Boot**.
- It provides functionality for managing customer data, including **CRUD** functionality to customer records
- The application integrates with external **APIs** to handle **User Authentication** and customer data retrieval.

IoT Switch Using ESP32 ↗ | C++(Arduino), HTML, JavaScript, XML

- Successfully designed and implemented an ESP Web Server using Arduino IDE and ESPAsyncWebServer library for an Internet of Things (IoT) project.
- Applied coding skills in **C++ (Arduino)** to develop the **firmware** for **ESP32 microcontroller**, demonstrating a strong grasp of **embedded systems programming**.
- Applied coding skills in **Configured the ESP32 to connect to a WiFi network**, addressing challenges related to **network connectivity and security**.
- Implemented **error handling and troubleshooting mechanisms**, ensuring robust communication between the **web server and the IoT device**, showcasing a **problem-solving** approach.

Personal Blog WebApp ↗ | PYTHON, Flask, SQLite, HTML, CSS and JavaScript

- Use **Flask** to create routes for user registration, login, and blog post creation and Design a simple frontend using **HTML, CSS, and JavaScript**.
- Use **SQLite** to store user credentials and blog posts and Implement **user authentication** to secure the application.

Arduino-based, Bluetooth-controlled RC Car ↗ | Arduino programming, MIT App Inventor, Electronics

- Utilized an **Arduino Uno** board for **MicroController Programming** and interfaced it with a Bluetooth module, enabling wireless communication with a **Custom App** developed using MIT App Inventor.
- Overcame challenges in **integrating hardware** components, **writing efficient code**, and ensuring **seamless communication** between the Arduino board and the smartphone application, highlighting **problem-solving** skills in a **multidisciplinary** project.

EXPERIENCE

TULIP Intern ↗	Raipur Municipal Corporation	**June 2023 - Aug 2023**

- **Researched** and **developed** comprehensive **policy recommendations** on urban land use, influencing the adoption of **sustainable planning strategies** that were integrated into **citywide development projects over 6 months.**
- **Analyzed** and **streamlined data** entry processes for a **government administration project**, **enhancing productivity** and significantly **reducing manual errors** through the development of an automated **Excel VBA** solution.
- **Researched** and **analyzed industry trends** in **urban planning**, delivering a **comprehensive report** that **influenced** the organization's **strategic planning** for **sustainable community development** initiatives.

INVOLVEMENT

Technical Member	Technical Club 'FLUX' (SATI, Vidisha)	**Sept 2023 - Present**