Suhas Singh

+91-7735536503 | singhsuhas77@gmail.com | www.linkedin.com/in/suhas-singh-1894ss9 | github.com/singhsuhas77

EDUCATION

VIT Bhopal University — Sehore, Madhya Pradesh
Bachelor of Technology, Computer Science – CGPA: 8.34 — *Sep. 2022 – May 2026*

St. Thomas' Church School, Howrah — Howrah, West Bengal
Indian School Certificate – Percentage: 85.83% — *April 2021 – April 2022*

St. Thomas' Church School, Howrah — Howrah, West Bengal
Indian Certificate of Secondary Education – Percentage: 88.9% — *April 2019 – April 2020*

PROJECTS

Heart Disease Prediction System | *Python, Flask, HTML, CSS, Bootstrap* — September 2024 – Present

- **Tech Stack:** Backend - Python (Flask), Machine Learning - Scikit-Learn, Frontend - HTML, CSS, Bootstrap, Model stored using Pickle.
- **Data Processing:** Used **Heart Disease Cleveland dataset**, cleaned data, handled missing values, and applied **feature scaling** (StandardScaler).
- **Model Selection:** Trained and evaluated multiple models (**Random Forest, Gradient Boosting, SVM, Logistic Regression, KNN, Decision Tree**) using **cross-validation** and selected the best-performing model.
- **Performance Analysis:** Measured accuracy, confusion matrix, and classification report, visualized results using **Matplotlib & Seaborn**.
- **Deployment:** Integrated the trained model with **Flask API**, built a user-friendly frontend with **Bootstrap**, and saved the best model for real-time predictions.

Fake News Detection System | *Python, Flask, HTML, CSS, Bootstrap* — Jan. 2024 – May 2024

- **Tech Stack:** Backend - Python (Flask), Machine Learning - Scikit-Learn, Frontend - HTML, CSS, Bootstrap, Model stored using Pickle.
- **Data Processing & Model:** Used **TF-IDF vectorization** for text preprocessing and trained a **machine learning model** for fake news classification.
- **Model Loading & Prediction:** Loaded the **vectorizer** and trained model (vectorizer.pkl, finalized_model.pkl), processed user input, and predicted if the news is **Fake or Real**.
- **Web Interface:** Developed a **Flask-based web app** with pages for **Home, Prediction, Contact Us, and About Us**, taking user input for fake news detection.
- **Deployment:** Integrated the model with **Flask API**, built a user-friendly frontend using **Bootstrap**, and displayed prediction results dynamically.

RFID Smart Door Lock| *Arduino, Arduino IDE, RFID Modules, C++* — Jan. 2024 – May 2024

- **Technology Used:** Built using Arduino, RFID Module **(MFRC522)**, Servo Motor, and SPI Communication for secure access control**.**
- **Functionality:** The system scans RFID cards, compares the **UID** with a predefined **authorized ID**, and operates the servo motor to lock/unlock the door.
- **Automation & Security:** Ensures automated door operations, allowing seamless and secure access for over **30 personnel**.
- **Code Workflow:** Initializes **RFID module and servo**, reads card UID, verifies authentication, and **controls the door lock state** accordingly.
- **Real-World Application:** Provides a **cost-effective, efficient, and secure** access control system, ideal for **homes, offices, and restricted areas**.

CERTIFICATIONS

- **NPTEL-** Cloud Computing
- **Coursera-** The Bits and Bytes of Computer Networking
- **Vityarthi-** Python Essentials

TECHNICAL SKILLS

Languages: Java, Python, C++, SQL (Postgres), JavaScript, HTML/CSS
Frameworks: React, Node.js, Flask, WordPress, Bootstrap
Developer Tools: Git, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Arduino IDE
Libraries: pandas, NumPy, Matplotlib, Scikit-Learn