# Sowbagya Sivakumar

github.com/sowbagya-049

### **EDUCATION**

#### **MSc-Decision and Computing Science**

Coimbatore Institute Of Technology

Current CGPA:9.17

Grade 12

Bharathi Matric HR.SEC School Grade Percentage: 87%

07/2023 - present | coimbatore, India

06/2022 - 03/2023 | palladam, India

#### **PROJECTS**

#### **Air Pollution Analysis**

Tool Used: Python (Pandas, NumPy, Matplotlib, Seaborn)

- This project focuses on exploring and visualizing air quality data to uncover pollution trends and assess environmental impact.
- It analyzes key pollutants like PM2.5, PM10, NO<sub>2</sub>, SO<sub>2</sub>, CO, NH<sub>3</sub>, and O<sub>3</sub> across different regions and time periods using Python, Pandas, Matplotlib, and Seaborn.
- Through exploratory data analysis (EDA), the project identifies highly polluted areas, major pollutant contributors, and patterns over time, offering valuable insights for environmental awareness and policymaking.

#### NYC Yellow Taxi Trip

Tools Used: Python, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn

- Algorithms: Logisitc Regression, ARIMA, K-Means
- Performed predictive analysis on NYC Yellow Taxi trip data using Python, focusing on fare prediction, demand forecasting, and trip classification.
- Applied machine learning models (Logistic Regression) achieving up to 87% accuracy for trip type prediction.
- Implemented ARIMA time series forecasting for taxi demand with **90.1% accuracy**.
- Conducted end-to-end data preprocessing, feature engineering, outlier handling, and visualization using Pandas, Seaborn, and Matplotlib.

# **CERTIFICATES**

- SEO Certificate Course -HubSpot Academy ∂
- Aignite'25- The Ultimate AI Hackthon ∂
- NPTEL DBMS ∅
- Predictive Analysis Workshop -Kanam'25 ∂
- Computing Research Day'24-Tech Research poseter Presentation *⊘*

#### SKILLS

• Languages: C, Python, R, SQL, Java

Database: MySQL, Oracle

- Developer Tools: VS Code, Jupyter Notebook
- Soft Skills: Flexed, Collaborated, Scheduled efficiently, Coordinated tasks

#### INTERESTS

Machine Learning | Data Analytics | Data Structures and Algorithms | Digital Marketing | Data Visualization

## PROFESSIONAL EXPERIENCE

Designer

Datalytics club- CIT

06/2025 - 05/2026

Online Internship in Data Science (1 month) - Code Soft ∅

Online Internship in Data Science (1 week) - Prompt InfoTech ℰ