Shalavya Agrawal

EDUCATION

Northeastern University, Master of Science□09/2025 − presentMaster's degree in Data ScienceBoston, United States

Vellore Institute of Technology, *Bachelor of Technology* ☑ 09/2021 − 07/2025 Bachelor's degree in Computer Science and Engineering, **CGPA- 9.24** Vellore, India

Daly College, Higher Secondary Education☑03/2019 – 06/2021CBSE 12th Board, Percentage-95.2%Indore, India

PROFESSIONAL EXPERIENCE

The Modern Data Company, *Product Intern* ☑ 01/2025 – 04/2025

• Contributed to the development of **Kairos**, an **Al-powered insights and diagnostic agent** that reduced time-toIndore, India

insight for enterprise clients by **40**%.

• Designed and refined the **ontology layer**, improving cross-domain metric traceability by **30%**.

WebCraft IT, *Machine Learning Intern* ☑ 06/2024 – 12/2024 • Worked on a **sales forecasting models** with **85%** accuracy, enhancing client web-based solutions for reliable Indore, India

forecasting and strategic decision-making.

• Worked on end-to-end machine learning solutions to support data-driven insights and functionality.

ASAP Tech. *Data Science Intern* ☑ 12/2023 – 02/2024

• Implemented a **fraud detection models**, reducing client fraud risk by **25**% within ERP-based financial systems.

• Enhanced model performance by **30%** using anomaly detection and feature engineering, supporting secure ERP solutions in financial security.

Vinfotech Pvt. Ltd., Data Science Intern ☑ 09/2023 – 11/2023

• Engineered a **machine learning model** to predict cricket match outcomes and scores using XGBoost for the Perfect Lineup website, improving prediction accuracy by **15**%.

• Collaborated with the frontend team to integrate predictive analytics results into the website's user interface.

PROJECTS

Al-Powered Business Insights Agent 2

• Developed an **Al-driven agent** to connect **siloed business metrics** to outcomes, enabling faster root-cause analysis for revenue-impacting issues by designing an **ontology layer** to map relationships across domains.

Automated semantic modeling, SQL generation, and YAML configuration, reducing manual effort by ~60% and accelerating insight
delivery.

SpeechFlow - AI Meeting Assistant ☑

• Developed an end-to-end meeting assistant using Whisper, PyAnnote, LangChain, and ChromaDB, achieving 95%+ transcription accuracy and reducing manual note-taking effort by ~80%.

 Automated generation of structured meeting summaries and task tickets via LLMs and Pydantic, enabling 3× faster action item tracking through an interactive Streamlit interface.

AgriPredict - Crop Disease Detection & Yield Prediction

• Developed a dual-module web app using **DenseNet CNNs** and **Random Forest Regressors** achieving **95% accuracy** in disease detection and **<10% MAE** in yield prediction across multiple crop types.

• Built an end-to-end solution with **TensorFlow**, **OpenCV**, and **Flask**, improving decision-making and reducing crop diagnosis and forecasting time by **70**% for farmers and agronomists.

Chart Pattern + News Prediction Model ☑

• Developed a predictive model for automated chart pattern recognition using **Lasso Regression** to mark pivot points and with support and **resistance levels,** reducing manual effort by **70%**, enabling accurate swing trading decisions.

Integrated an LLM and Sentiment Analysis using MoneyControl API and Web Scraping to provide better market insights.

SKILLS

Technical and Tools

Machine Learning, Deep Learning, Data Science, Data Analysis, PowerBi, PostgreSQL, MySQL, DBMS, C++, Python, Arduino, Advanced Excel, HTML, CSS, Java, JavaScript.

Management

Entrepreneurship, Product Management, Marketing, Operations, Teamwork, Stock Market, Decision-Making, Conflict Resolution.

CERTIFICATES

AWS Academy Graduate 🛮

AWS Academy Cloud Foundations | 12/2023

Artificial Intelligence and Machine Learning ☐ Powered by Google Developers | 11/2023

Complete Guide to TensorFlow for Deep Learning with Python Pierian Training | 09/202

The Complete Node.js Developer Course ☑ Andrew Mead, Rob Percival | 10/2023

PUBLICATIONS

Comparative Analysis of Air Quality Indices Across Five Eastern States of India Using ML Models and Pollutant Based Insights, International Journal of Distributed Computing and Technology ☑

12/2024

Indore, India

Indore, India

 Analyzed historical pollutant data (PM2.5, PM10, NO2, SO2, CO, O3) sourced from the Central Pollution Control Board (CPCR)

• Employed machine learning models like AdaBoost and XGBoost to predict Air Quality Index (AQI) trends.