

AYUSHI DIXIT

DATA SCIENCE MAJOR

Indian Institute of Technology, Madras

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EDUCATION

BS DEGREE IN DATA SCIENCE AND APPLICATIONS 2022 - 2026
Indian Institute of Technology, MADRAS 8.3 CGPA

BACHELOR OF ARTS 2020-2023
University of Lucknow 77 %

COURSEWORK

- Machine Learning
- Linear Algebra for Engineers
- Data Structures and Algorithms
- Database Management
- Cloud Computing*
- Statistics
- Business Analytics and Intelligence
- Application Development
- System Commands

PROFESSIONAL EXPERIENCE

Academic Mentor, IIT MADRAS

Sep 2023 - April 2024

- Delivered 20+ interactive math lectures and bi-weekly data science doubt-clearing sessions to 30+ students.
- Driving a 20% average quiz score improvement and 15% boost in overall academic performance.

PROJECTS

Stock Sentiment Analysis on Reddit data

[Link](#)

- Scraped 10,000+ Reddit posts and comments using web scraping techniques
- Performed Natural Language Processing (NLP) using **TextBlob** and **Flair** to classify sentiment as positive, negative, or neutral, achieving **85%+** sentiment classification accuracy.
- Achieved a model accuracy of **88%** in predicting stock sentiment, contributing to market trend analysis.

CrimeCast: Forecasting Crime Categories

[Link](#)

- Conducted exploratory data analysis (EDA), 5-point summary, trained 8 classification models, including **XGBoost**, **K-Nearest Neighbors (KNN)**, **Support Vector Machine (SVM)**.
- Utilized **Python**, **Scikit-Learn**, **NumPy**, **Pandas**, and **Matplotlib** for implementation and data visualization.
- Achieved a leaderboard score of **95.7%**, demonstrating high predictive accuracy.

House Hold Management System

[Link](#)

- A Progressive Web Application (PWA) for managing household services, connecting customers with service professionals, and providing administrative tools for monitoring and managing the platform.
- Frontend:-** **Vue.js 3** with **Vue Router** and **Vuex**, **Bootstrap 5**, **Chart.js**
- Backend:-** **Flask** (Python) with **RESTful API**, **SQLAlchemy ORM**, **Flask-Security**, **Caching**, **Batchjobs**, Asynchronous tasks using **Celery**, **Redis**.

Optimized Sales and Management of a Pharma store

[Link](#)

- Implemented a Just-in-Time (JIT) inventory system, reducing stock-outs by **25%** and improving order fulfillment times by **30%**.
- Applied **ABC**, **VED**, **Pareto** (80/20 rule), and **Break-Even Analysis** to identify key product categories contributing to **80%** of revenue and proposed bundled offerings with value-based pricing, aiming for a **15% increase**
- Tech Stack:** MS Excel, Data Analysis, Business Intelligence, Inventory Management, Financial Analysis

SKILLS

- Technical Skills: Python, SQL, R-programming, Java, JavaScript
- ML & AI: Numpy, Pandas, SK-Learn , Flask, Matplotlib
- Web Technology: HTML/CSS, Redis, SQL-Alchemy
- Tools:- PostgreSQL, Git, Github, Linux, Tableau*
- Others: Data Visualization, NLP*, LLM*, Web Scraping

EXTRA-CURRICULAR

- Hugging Face Agents Course [Link](#)
- G-17 University Ambassador for SDG-14 (Life Below Water), advocating for marine life and sustainability.
- Silver Medalist in Freestyle Swimming for two consecutive years at the Interschool Championships.
- Active NSS Member, spearheading community welfare initiatives.