VISHESH PHUTELA

Portfolio • visheshphutela30@gmail.com • 21f3001040@ds.study.iitm.ac.in • +91 9253285945 • LinkedIn • GitHub

PROFESSIONAL EXPERIENCE

Teaching Assistant, Modern Application Development Project - I & II

Indian Institute of Technology, Madras

December 2023-Present

- Conduct level 1 Viva assessments for Modern Application Development Projects 1 and 2, evaluating student understanding and implementation of the given problem statements.
- Provide constructive feedback to guide student improvement in project outcomes and for the level 2 Vivas.
- Collaborate with instructors to ensure alignment between assessments and course objectives.

PERSONAL PROJECTS

Ticket TalesV2 - A Ticketing WebApp (Video, GitHub)

March 2023-September 2023

- Developed Ticket Tales, a single-page web application, using **Vue.js for the frontend** and **Flask for the backend**, with features for booking and managing tickets online for various shows and theatres.
- Leveraged **Redis and Celery** for **background jobs** and used **SQLite3 as the database** for efficient data storage and retrieval.
- Utilized **Redis for caching** to improve system performance and speed, making the application responsive and suitable for a high volume of users.
- It was a curriculum project for **Modern Application Development II**, also received a **Best Project Award** for this project and scored 95/100. (<u>Certificate</u>)

Taxi Fare Prediction - ML Project (Notebook, Kaggle)

September 2023-December 2023

- Developed a comprehensive machine learning project as part of a **Kaggle Competition**, focusing on taxi fare prediction, a **Regression problem**.
- Implemented end-to-end model development, including data preprocessing, Exploratory data analysis (EDA), feature engineering, model selection, and hyperparameter tuning.
- Trained and evaluated four regression models, including Linear Regression, KNN Regressor, Random Forest Regressor, and XGBoost Regressor, achieving the highest R2 score of 0.956 on the test dataset with XGBoost Regressor.
- It was a curriculum project for **Machine Learning Practice** and scored 100/100.

HSWC Business Analysis - Business Data Management Project (Drive)

December 2022-April 2023

- Performed **Data Analysis** on 8 months of business data of Haryana State Warehousing Corp. (Govt. organisation) and found **2 major underlying problems**.
- Identified **underutilized and overutilized districts** during peak and off-peak seasons by means of Data Analysis and developed strategies to address capacity and distribution challenges.
- Gave **7 Data-Driven recommendations** to improve efficiency, reduce operating costs, and enhance profitability for HSWC.
- It was a curriculum project of **Business Data Management**, I undertook the project spanning three stages: Proposal, Mid-term submission, and Final submission, culminating in a Viva presentation.

EDUCATION

Indian Institute of Technology Madras, Chennai, India

September 2021-2025

B.S. in Data Science and its Applications (GPA: 7.23/10.0)

Ch. Devi Lal State Institute of Engineering and Technology, Sirsa, Haryana

September 2020-2024

B.Tech. in Computer Science and Engineering (GPA: 8.45/10.0)

Maharaja Agarsain Sr. Sec. School, Sirsa, Haryana, India

March 2019-2020

12th Grade in Science (Non-Medical) (Percentage: 80/100)

SKILLS & INTERESTS

Python (NumPy, Pandas, Scikit-learn, Flask), SQL(Postgres, MySQL, Sqlite3), Data Science(Data Engineering and Analytics, MLOps), Machine Learning(Supervised, Unsupervised, Recommendation Systems), Data Analytics, AWS, Git