Varsha Thakur

Bengaluru, India 560032 | varshathakur9845@gmail.com | +91 9845793504 | linkedin.com/in/02varsha27
github.com/27-varsha

Summary

I am an engineering student passionate about Artificial Intelligence and Machine Learning. I have worked on several practical projects such as fraud detection in Ethereum transactions, customer churn prediction, and mobile price prediction using MLOps workflows. I also have experience in web development and have built my personal portfolio. I enjoy learning new tools and technologies and applying them to solve real-world problems.

Education

Kensri School 2010 - 2020

- **Coursework:** Central Board of Secondary Education (CBSE)

Presidency College 2020 - 2022

- **Coursework:** PCMB

B.M.S College of Engineering 2022 - 2026

- **Coursework:** B.E in Artificial Intelligence and Machine Learning

Skill Summary

Languages: Python, HTML, CSS, SQL

Frameworks: Pandas, Numpy, Scikit-Learn, Matplotlib, Seaborn, PyTorch, NLP, LangChain

Tools: Power BI, Excel, PowerPoint, Tableau

Platforms: Jupyter Notebook, Visual Studio Code, Google Colab

Experience

AI Intern – Sysfore Technologies

- Built foundational skills in Python and Object-Oriented Programming using industry-standard resources.
- Explored LangChain: prompt templates, chains, memory handling, and agent tools.
- Worked with NLP tasks: tokenization, stemming and chunking.
- Worked with vector databases (Qdrant) for implementing basic RAG pipelines.

Projects

1. Fraud Detection in Ethereum Cryptocurrency Transactions **github**

- This project detects fraudulent transactions on the Ethereum blockchain using Machine Learning. Ethereum, as a decentralized blockchain platform, facilitates millions of transactions daily. However, its anonymity and lack of central regulation make it susceptible to fraudulent activities such as money laundering, phishing, and Ponzi schemes.
- Tools Used: Python, XGBoost, TensorFlow, Blockchain Analytics

2. Customer Churn Prediction **github**

- A machine learning pipeline to predict customer churn based on behavior and service usage data from a telecom company. This project includes data preprocessing, feature engineering, model tuning, and evaluation using Python and Scikit-learn. The goal is to build a binary classification model that predicts whether a customer will churn (Yes or No).
- Tools Used: Python, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, SMOTE (for data balancing)

3. Personal Portfolio Website **github**

- Developed a responsive and visually appealing personal portfolio to showcase my skills, projects, and achievements. Implemented custom design layouts, including navigation, project showcase, and contact sections.
- Tools Used: HTML, CSS, JavaScript (for data balancing)
- Link for the website: Personal Portfolio

4. Mobile Phone Price Prediction(MLOps) **github**, **website**

- Built a mobile price prediction web app using Streamlit, trained with a Random Forest model on real smartphone data. Implemented MLOps practices including automated testing with Pytest and model versioning. Set up a CI/CD pipeline using GitHub Actions for seamless integration and deployment.
- Tools Used: Python, Scikit-learn, Streamlit, Joblib, GitHub Actions, Git, VS Code

Certifications

Completion in Data Science Job Simulation from British Airways(Forage)

- Completed a simulation focusing on how data science is a critical component of British Airways success
- Scraped and analyzed customer review data to uncover findings. Built a predictive model to understand factors that influence buying behavior

Microsoft Power BI workshop(OfficeMaster)

- Learned how to create AI powered interactive dashboards

Supervised Machine Learning: Regression and Classification(Coursera)

- It introduces the fundamentals of supervised learning. It covers key concepts like linear regression, logistic regression, loss functions, and gradient descent.