

PIYUSH KHANDALKAR

Skills

- Proficient in **Python** (Pandas, NumPy, Scikit-learn, TensorFlow) and **SQL** for data analysis and machine learning
- **Machine Learning**: Regression, classification, clustering, neural networks
- Experienced With **LINUX** and Knowledge of **version control systems** (Git).
- **Statistics & Mathematics**: Linear algebra, probability, hypothesis testing A/B testing and probability distributions.
- **Deep Learning** (ANN, CNN, RNN)
- **Visualization**: Matplotlib, Tableau
- Strong **problem-solving** abilities, particularly in identifying patterns in complex datasets.
- **Good communication** skills for presenting technical insights.

Projects

PORTFOLIO DIVERSIFICATION OPTIMIZER

- Designed and implemented a Portfolio Diversification Optimizer to recommend asset allocation strategies and minimize portfolio risk.
- Analyzed financial data to calculate returns, risks, and correlations for effective diversification.
- Utilized Markowitz Optimization and Monte Carlo simulations to achieve optimal portfolio performance.
- Built an interactive Dash-based dashboard for users to input data, view results, and explore the efficient frontier for risk-return analysis.

EXPENSE FORECASTING WITH ANOMALY DETECTION

- Developed a machine learning model for expense forecasting and anomaly detection to analyze personal and business spending.
- Cleaned and preprocessed financial data for time-series forecasting using ARIMA and LSTM models.
- Implemented anomaly detection with Isolation Forest and visualized results using Plotly in an interactive Streamlit app.
- Delivered a user-friendly interface for uploading data and viewing insights, enabling actionable decision-making.

MARKET BASKET ANALYZER IN PYTHON

- Developed a web application using Flask, allowing users to upload transaction data and generate association rules.
- Cleaned and preprocessed data, implemented the Apriori algorithm, and created visualizations to present insights from the analysis.
- Utilized Pandas for data manipulation and Matplotlib for data visualization.
- Collaborated with cross-functional teams to deliver a user-friendly and datadriven solution

Work Experience

GOVERNMENT PROJECT INTERNSHIP

- worked under the Government of Maharashtra to develop a software solution for digitizing employee workflow.
- Successfully increased office efficiency by an impressive 60% through our collaborative efforts.
- This internship opportunity was helpful in understanding how real projects run.

Education

BTECH (2020-2024)

Rajiv Gandhi College Of Engineering Research & Technology, Chandrapur (RCERT)

Computer Science & Engineering

CGPA- 7.77/10