pre finalyear project aiml:

My Pre final year Project XRP Crytpocurremcy Return Prediction

XRP Cryptocurrency Return Prediction is a artificial and machine learning project aimed at forecasting the future returns of XRP (Ripple), one of the leading cryptocurrencies.

The project involves collecting and analyzing historical market data to identify trends and patterns that can help in predicting short-term return fluctuations.

The project leverages Python along with libraries like Pandas and NumPy for data manipulation, and Scikit-learn, XGBoost, Randomforest, and potentially LSTM models for predictive modeling. Visualization tools such as Matplotlib and Seaborn are used to perform exploratory data analysis (EDA) and to compare actual vs predicted returns.

Key steps include data cleaning, feature engineering, building and evaluating machine learning models, and tuning hyperparameters for better performance. Various performance metrics like RMSE, MAE, and R<sup>2</sup> score are used to assess the models.

By comparing different models and visualizing the results, this project demonstrates a practical approach to financial time series forecasting. It also offers insights into the behavior of XRP's market trends and highlights the challenges and opportunities in applying AI ML to cryptocurrency prediction.