

MACHINE LEARNING PROJECT PROPOSAL

CHARTING CRYPTO: ML APPROACH ON BITCOIN PRICE PREDICTION

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Abstract/ Objectives:

The unpredictable nature of cryptocurrency markets presents a challenging environment for prediction and calls for innovative approaches to forecast price trends. The goal of this project is to ascertain with the extent of accuracy the bitcoin price predictions can be made. We attempt this goal by taking into consideration various parameters that affect the price patterns. This is achieved through the utilization of historical and recent Bitcoin price data, daily trends and advanced machine learning algorithms. This project seeks to create predictive models capable of deciphering patterns within the intricate price movements and develop a model that can capture patterns and trends in Bitcoin price movements, with the goal of providing insights into potential price trends for informed decision-making.

Novelty and Expected outcomes:

The project's focus on real-time prediction and evaluation against actual market data adds value by providing a practical perspective on model performance. The novelty is based on the application of machine learning techniques to predict Bitcoin prices, a domain characterized by high volatility and uncertainty.

- The project helps to yield accurate short-term Bitcoin price and provide insights into the factors influencing the price movements through the analysis of feature importance and correlations.
- Unveil market patterns and trends.
- Risk Assessment and decision support system for traders and investors.
- The project's methodology and findings can serve as a foundation for further research and improvement in the field of cryptocurrency price prediction.
- The expected outcomes are both accurate price predictions and valuable insights into the complex dynamics of the cryptocurrency market, contributing towards the advancements of predictive modelling in the financial technology landscape.

End-End Flow of the project in a diagram:

