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Group 4:

• Summary of the report

Cryptocurrency is a heated topic today, and it is estimated that over \$40 billion worth of cryptocurrencies is traded every day. Consequently, the cryptocurrency market is creating a large amount of price movement data, as in the stock market. The goal of this project is to use machine learning techniques to predict and forecast the short-term returns.

The main body of the report includes:

- 1. Data overview: EDA to find features correlated to cryptocurrencies
- 2. Feature engineering: Additional features created to better fit this finance/economics-related task (sorry not an expert in this field: P)
- 3. Model selection: comprehensive coverage of classical (e.g., light GBM) and state-of-the-art models (e.g., Wavenet) to compare their performance
- 4. Model techniques: Specific methods tailored for time-series data
- 5. Back testing: Analysis to validate their strategy's performance with clear visuals and results

• Strengths of the report:

The report is an exhaustive documentation of their project.

For each model, there is clear elaboration with visuals on the strengths and characteristics.

Because this project involved time-series data in financial market, they utilized many features and techniques to provide better interpretation of the data and models.

In addition to the standard Kaggle test metric with Pearson's correlation, they also used the backtesting to validate their conclusion.

And the results from some deep learning models are very promising.

• Weakness of the report:

Not much weakness in my opinion. One possible direction of improvement is to include more up-to-date price movements if possible.

• Evaluation on quality of writing - 5:

The report was written clearly and logically from data overview to the analysis.

• Evaluation on presentation - 5:

The presentation from this group was concise and informative. You can easily tell that they are very familiar with each part of the project from their presentation.

• Evaluation on creativity - 5:

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This is a very intriguing application of deep learning models in finance-related work. From their project, I felt the versatility of data science in multiple fileds.

• Confidence on your assessment - 2: