

IEOR E4729 Final Project Proposal

Crypto Currency Strategy

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1 Objective

- Figure out the differences between cryptocurrency market and other fiat currency market.
- Understand the trading strategy and signal-based momentum model used in Chu et al. [2020].
- Try to realize the strategies on cryptocurrencies market [Chu et al., 2020, Vo, 2018, Hudson, 2019] and backtest them.

2 Product and Market

Cryptocurrencies. Cryptocurrency Market.

3 Data

From `CryptoCompare.com` choose top 10 cryptocurrencies by market cap using their free API (<https://min-api.cryptocompare.com/documentation>).

References

Jeffrey Chu, Stephen Chan, and Yuanyuan Zhang. High frequency momentum trading with cryptocurrencies. *Research in international business and finance*, 52:101176, 2020. doi: <https://doi.org/10.1016/j.ribaf.2019.101176>.

Robert Hudson. Technical trading and cryptocurrencies. *Annals of operations research*, 2019. doi: <https://doi.org/10.1007/s10479-019-03357-1>.

Au Vo. A high-frequency algorithmic trading strategy for cryptocurrency. *Annals of operations research*, pages 1–14, 2018. doi: <https://doi.org/10.1080/08874417.2018.1552090>.