

Lab4

Cantor Alexandru Horatiu

22 November 2023

1 Data modelling

2 Case Study

3 Implementation

4 Citations

- [1] [11] [6] [5] [3]
[12] [9] [14] [13] [4]
[10] [7] [15] [2] [8]

References

- [1] Sonia R Bentes and Rui Menezes. Entropy: A new measure of stock market volatility? *Journal of Physics: Conference Series*, 394(1):012033, nov 2012.
- [2] John M. Cozzolino and Michael J. Zahner. The maximum-entropy distribution of the future market price of a stock. *Operations Research*, 21(6):1200–1211, 1973.
- [3] Aram Ebtekar. The algorithmic second law of thermodynamics, 2023.
- [4] Rongbao Gu. Multiscale shannon entropy and its application in the stock market. *Physica A: Statistical Mechanics and its Applications*, 484:215–224, 2017.
- [5] Martin Hilbert and David Darmon. How complexity and uncertainty grew with algorithmic trading. *Entropy*, 22(5), 2020.
- [6] Aleksander Jakimowicz. The role of entropy in the development of economics. *Entropy*, 22(4), 2020.
- [7] S. Sohn K. Ahn, D. Lee and B. Yang. Stock market uncertainty and economic fundamentals: an entropy-based approach. *Quantitative Finance*, 19(7):1151–1163, 2019.

- [8] Ladislav Kristoufek and Miloslav Vosvrda. Measuring capital market efficiency: Long-term memory, fractal dimension and approximate entropy. *The European Physical Journal B*, 87:art. 162, 07 2013.
- [9] Joanna Olbryś and Krzysztof Ostrowski. An entropy-based approach to measurement of stock market depth. *Entropy*, 23(5), 2021.
- [10] Joanna Olbryś and Krzysztof Ostrowski. An entropy-based approach to measurement of stock market depth. *Entropy*, 23, 2021.
- [11] Y. Sinai. Kolmogorov-Sinai entropy. *Scholarpedia*, 4(3):2034, 2009. revision #91407.
- [12] Gaurang Sonkavde, Deepak Sudhakar Dharrao, Anupkumar M. Bongale, Sarika T. Deokate, Deepak Doreswamy, and Subraya Krishna Bhat. Forecasting stock market prices using machine learning and deep learning models: A systematic review, performance analysis and discussion of implications. *International Journal of Financial Studies*, 11(3), 2023.
- [13] Claudiu Vintė and Marcel Ausloos. The Cross-Sectional Intrinsic Entropy. A Comprehensive Stock Market Volatility Estimator. Papers 2205.00104, arXiv.org, April 2022.
- [14] Claudiu Vintė and Marcel Ausloos. The cross-sectional intrinsic entropy—a comprehensive stock market volatility estimator. *Entropy*, 24(5):623, apr 2022.
- [15] Zang Yeze and Wang Yiyang. Stock price prediction based on information entropy and artificial neural network. In *2019 5th International Conference on Information Management (ICIM)*, pages 248–251, March 2019.