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Enhancing Technical Trading Strategy on the Bitcoin Market using News Headlines and Language Models

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Abstract : we present a technical trading strategy that leverages the FinBERT language model and financial news analysis with a focus on news related to a subset of Nasdaq 100 stocks. Our approach surpasses the baseline Range Break-out strategy in the Bitcoin market, yielding a remarkable 24.8% increase in the win ratio for all Friday trades and an impressive 48.9% surge in short trades specifically on Fridays. Moreover, we conduct rigorous hypothesis testing to establish the statistical significance of these improvements. Our findings underscore considerable potential of our NLP-driven approach in enhancing trading strategies and achieving greater profitability within financial markets.

Keywords : quantitative finance, technical analysis, bitcoin market, NLP, language models, FinBERT, technical trading
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