BIG DATA & ALGORITHMIC FINANCE

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PhD on NLP applied to Finance (AiForAlpha, CentraleSupélec) supervised by Eric Benhamou and Damien Challet.

CAN CHATGPT COMPUTE TRUSTWORTHY SENTIMENT SCORES FROM BLOOMBERG MARKET WRAPS?

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We used a dataset of daily Bloomberg Financial Market Summaries from 2010 to 2023, reposted on large financial media, to determine how global news headlines may affect stock market movements using ChatGPT and a two-stage prompt approach. We document a statistically significant positive correlation between the sentiment score and future equity market returns over short to medium term, which reverts to a negative correlation over longer horizons. Validation of this correlation pattern across multiple equity markets indicates its robustness across equity regions and resilience to non-linearity, evidenced by comparison of Pearson and Spearman correlations. Finally, we provide an estimate of the optimal horizon that strikes a balance between reactivity to new information and correlation.

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