Contribution ID: **50** Type: **Poster**

# Ethereum price forecasting using deep neural networks

*Thursday 24 April 2025 10:45 (30 minutes)*

Short-term forecasting of cryptocurrency prices remains a challenging task due to the high volatility and complex market dynamics of digital assets like Ethereum. This study proposes a hybrid deep learning model, that integrates networks such as Bi-LSTM, FinBERT and GRU, seeking to provide a comprehensive analysis of their applicability in this domain and enhance predictive accuracy for this currency. It incorporates news sentiment analysis as an additional predictive feature, aiming to capture broader market sentiment trends. The model was trained using historical Ethereum price data, along with trading volume, technical indicators, and sentiment scores extracted from news sources. Results indicate that the hybrid model outperforms traditional standalone models, suggesting that combining multiple architectures improves short-term price forecasting. However, challenges such as sentiment data noise and potential overfitting highlight areas for further refinement.

**Author:** ROZWADOWSKI, Oskar (Warsaw University of Technology)

**Presenter:** ROZWADOWSKI, Oskar (Warsaw University of Technology)

**Session Classification:** Session B (Poster)