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## BiLSTM for Financial Volatility Forecasting

### Communication Info

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### Abstract

Forecasting financial market volatility is important for managing risk and making investment decisions. Traditional models often struggle with the complexity and nonlinear patterns of financial time series [1]. In this work, we use a **Bidirectional Long Short-Term Memory (BiLSTM)** model to forecast volatility [2,3].

BiLSTM looks at both past and future data points, which helps capture the dynamic behavior of volatility. We apply the model to financial time series using realized volatility as the target, and we evaluate its accuracy with RMSE, MAE, and MSE.

The results show that BiLSTM can produce reliable volatility forecasts and capture complex patterns in the data. This suggests that BiLSTM is a useful tool for financial forecasting and can support risk management [2,3].

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### References

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