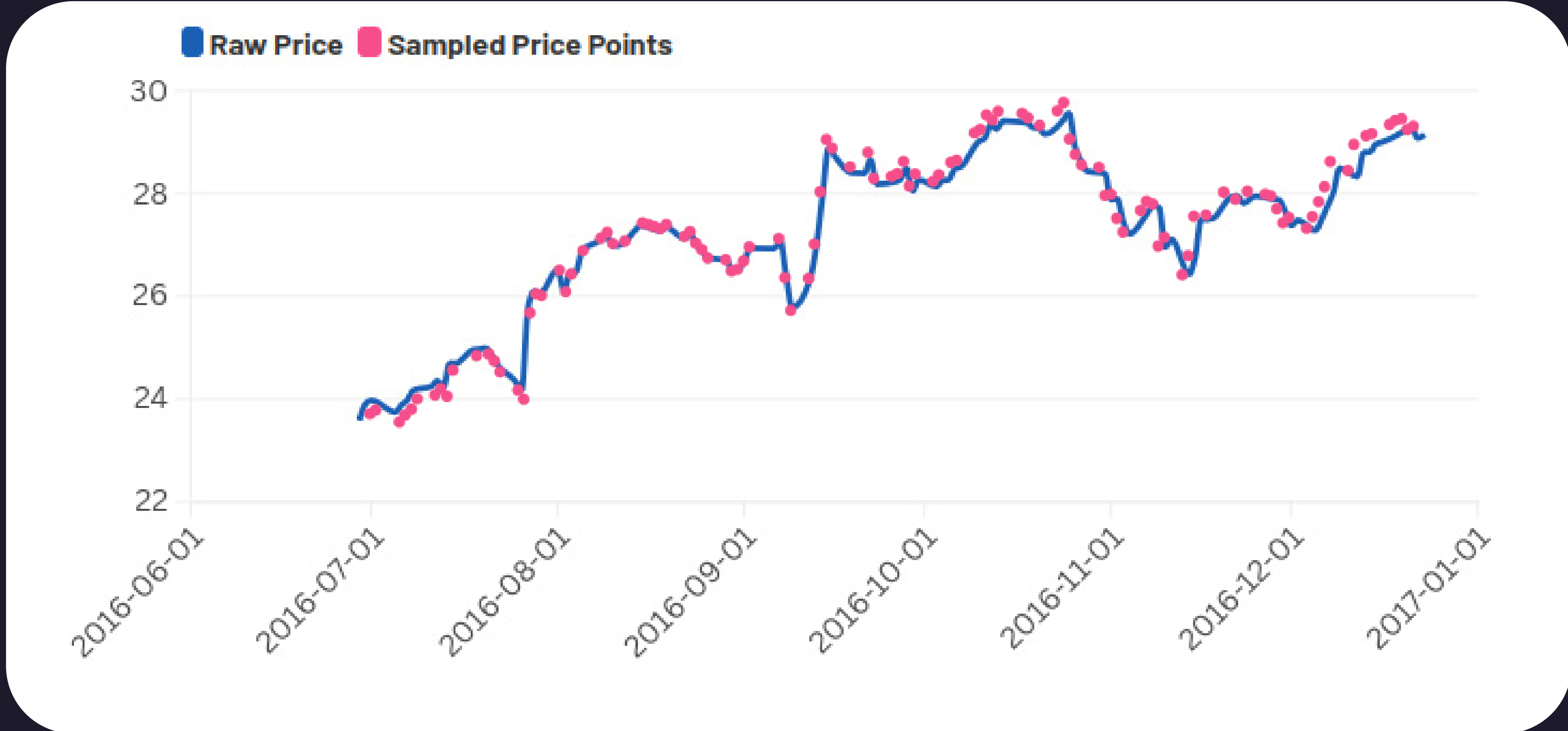
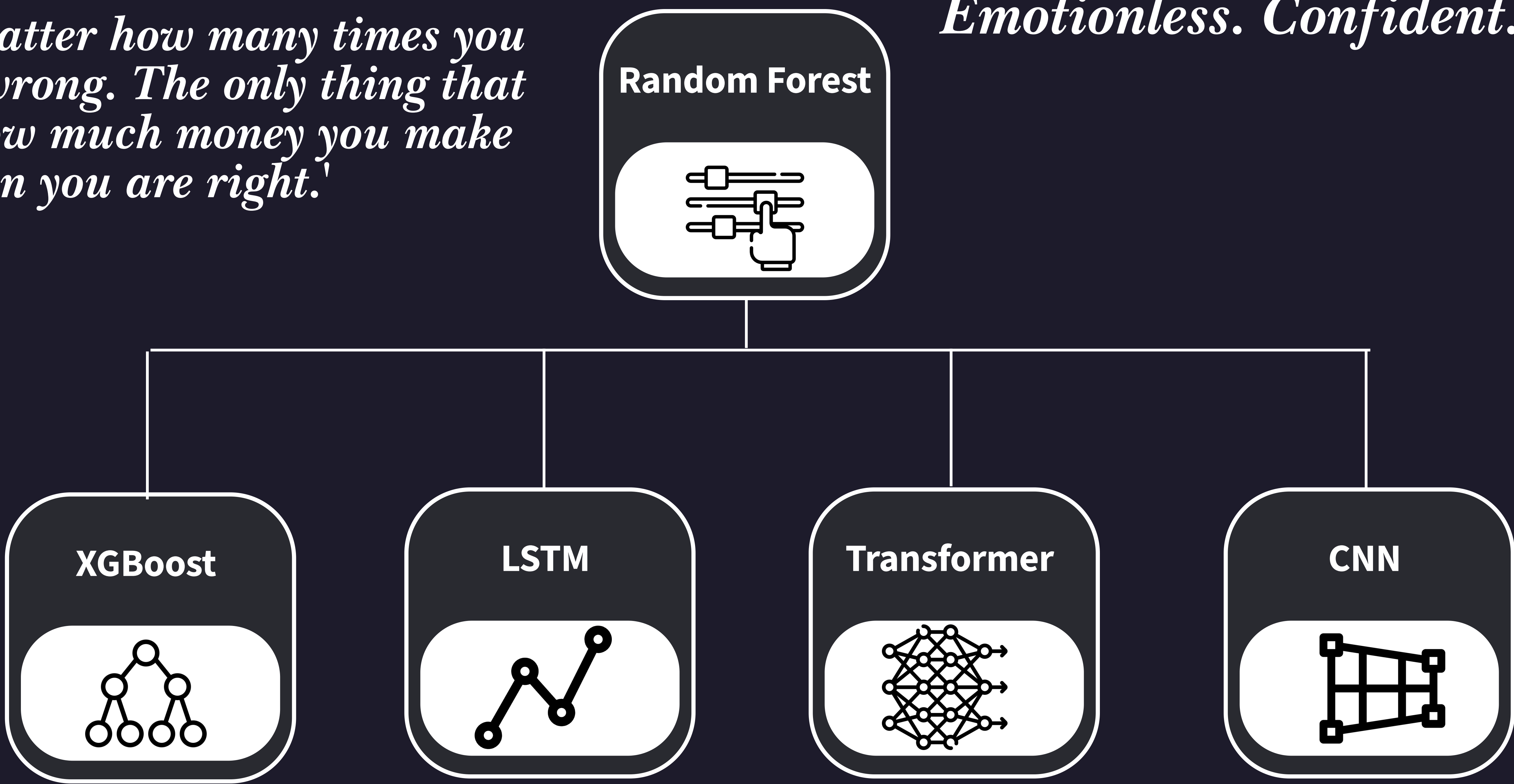


MetaTrader

'It does not matter how many times you are right or wrong. The only thing that matters is how much money you make when you are right.'

Emotionless. Confident. Profitable.

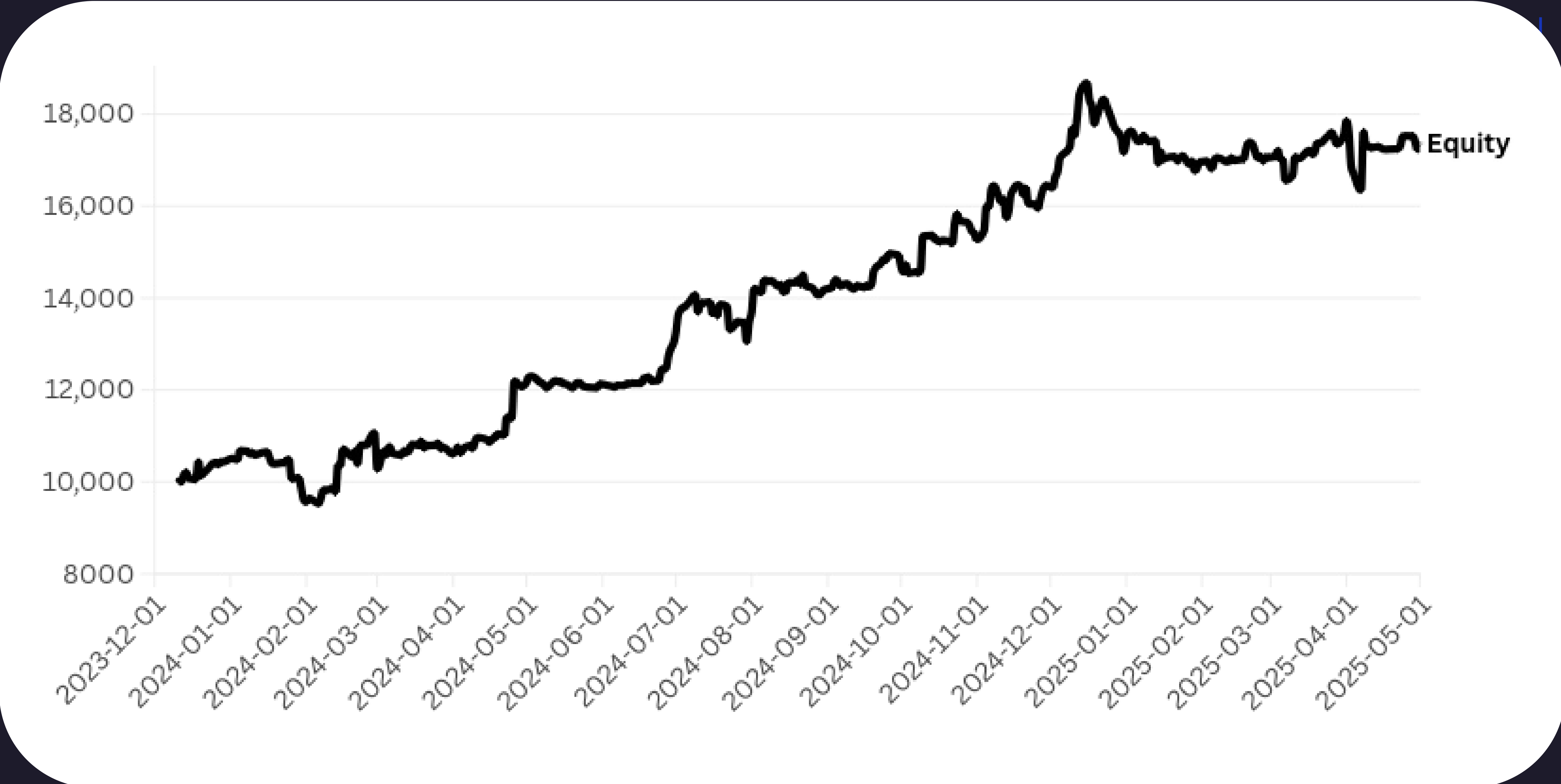
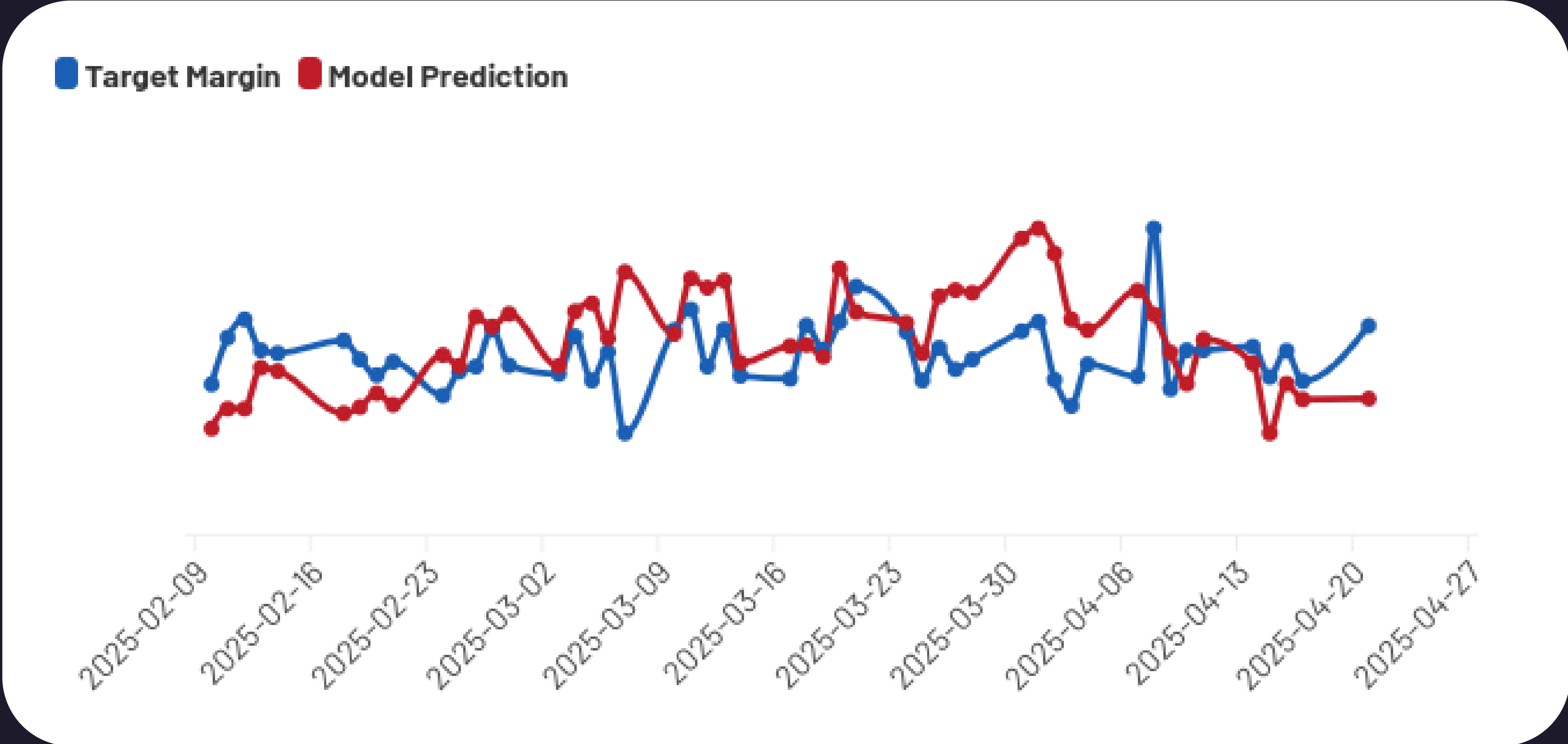


Portfolio managers typically place a bet after some event takes place. We can **characterize an event as significant**, and let the ML algorithm learn whether there is an accurate prediction function under those circumstances.

The process specifies the event and adds **technical indicators** like moving averages, RSI, and MACD during preprocessing. While the ML algorithm assesses significance, it depends on expert **feature engineering** and domain knowledge.

Hierarchical stacking ensemble is a two-level ensemble learning approach where models are stacked per ticker, and their outputs combined by a cross-ticker meta-model. This structure enhances predictive performance while reducing overfitting through diverse models and hierarchical aggregation.

The **meta-model** assigns dynamic weights to each ticker's **base model predictions**, determining the strength and direction (long or short) of the position. By analyzing outputs across tickers, it optimizes **portfolio allocation**, balancing exposures to maximize profit while managing risk.



Initial Balance: \$10000.00
Final Balance: \$17362.30

Total Return: 73.62%
Annualized Return: 49.11%

Sharpe Ratio: 1.83
Max. Drawdown: 12.47%

Win Rate: 53.60%

Trading Days: 348