

AI-Enabled Automated Trading System: Trend Analysis, Entry/Exit Strategies and Risk Controls

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Abstract: *In today's highly volatile financial markets, human-driven trading often leads to inconsistent results due to emotional biases, inadequate market analysis, and delayed reactions to price fluctuations. Many beginner and even intermediate traders rely on social media tips or instincts rather than factual market data, which frequently results in poor decisions and significant financial losses. To overcome these limitations, this project proposes an AI-powered Trading System designed to automate trade analysis, strategy formation, and decision execution using artificial intelligence and machine learning models.*

The system uses real-time and historical market data to forecast possible price movements and automatically execute trades based on preset strategies, including profit-target and stop-loss mechanisms. Through the incorporation of AI-based algorithms, the system ensures emotionless trading by removing the influence of impulsive decisions, greed, or fear, all of which tend to impede profitability. By providing traders with a quick and dependable decision-support tool, trend forecasting, real-time execution, and portfolio performance monitoring, it further increases efficiency.

Data collection, preprocessing, predictive modeling, and automated trading execution are some of the AI components that make up the system's architecture, which enables it to dynamically adjust to changes in the market. Before entering actual markets, novices should practice trading strategies with virtual currency to reduce risk and build confidence.

All things considered, the suggested AI Trading System represents a significant advancement in intelligent, data-driven, and self-governing trading. It speeds up decision-making in addition to lowering manual intervention. By combining state-of-the-art technologies such as machine learning. With the use of automation and predictive analytics, this system seeks to make trading profitable and accessible for both new and seasoned traders in the quickly changing financial landscape..

Keywords: AI-powered trading system, automated trading, machine learning models, real-time market data, historical data analysis, emotionless trading, trading automation, data-driven decision making, market trend prediction, virtual trading

