# Submission Summary

**Conference Name**

8th International Conference on Emerging Technologies in Computer Engineering: Advances in Computing, Healthcare and Smart Systems

**Paper ID**

272

**Paper Title**

Finalgo: A Rule-Based Automated Stock Market Trading System

**Abstract**

Finalgo is a rule-based automated stock trading platform designed to eliminate emotional bias in trading decisions by executing predefined strategies when market conditions align with user-configured parameters. The system integrates React.js for the frontend interface, Node.js for backend logic, and real-time financial data APIs such as Alpha Vantage to monitor market trends. Key strategies include moving average crossovers, which trigger automated buy/sell orders. By enforcing static rules, Finalgo ensures disciplined trading while reducing human error. Experimental results demonstrate improved consistency in trade execution compared to manual methods. The platform’s static rules ensure consistency, minimizing human error and deviations caused by cognitive biases. Experimental results highlight a 35% reduction in overtrading and a 22% improvement in capital preservation during market downturns compared to manual methods. However, the system’s current reliance on static parameters limits adaptability in sideways markets, where frequent whipsaws diminish returns. Future iterations aim to incorporate reinforcement learning (RL) for dynamic rule adjustments, enabling real-time strategy optimization based on volatility regimes.

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**Authors**

**Puneet Singh** (KIET Group of Institutions) <puneet.2125csai1027@kiet.edu>
Arshit Teotia (KIET Group of Institutions) <arshit.2125csme1044@kiet.edu>
Akshay Karanwal (KIET Group of Institutions) <akshay.2125csai1017@kiet.edu>
Naman Agarwal (KIET Group of Institutions) <naman.2125csme1017@kiet.edu>
Laxman Singh (KIET Group of Institutions) <laxman.mehlawat01@gmail.com>
Rekha Kashyap (KIET Group of Institutions) <rekha.kashyap@kiet.edu>

**Submission Files**

FINALGO RESEARCH PAPER SUBMISSION.pdf (1.1 Mb, 5/18/2025, 10:49:05 PM)

# Submission Summary

**Conference Name**
2025 IEEE International Conference on Data, Energy and Communication Networks

**Track Name**
Track 1: Data Science, AI, Smart Analytics and Quantum Computing

**Paper ID**
62

**Paper Title**
Finalgo: A Rule-Based Automated Stock Market Trading System

**Abstract**
Finalgo is a rule-based automated stock trading platform designed to eliminate emotional bias in trading decisions by executing predefined strategies when market conditions align with user-configured parameters. The system integrates React.js for the frontend interface, Node.js for backend logic, and real-time financial data APIs such as Alpha Vantage to monitor market trends. Key strategies include moving average crossovers, which trigger automated buy/sell orders. By enforcing static rules, Finalgo ensures disciplined trading while reducing human error. Experimental results demonstrate improved consistency in trade execution compared to manual methods. The platform’s static rules ensure consistency, minimizing human error and deviations caused by cognitive biases. Experimental results highlight a 35% reduction in overtrading and a 22% improvement in capital preservation during market downturns compared to manual methods. However, the system’s current reliance on static parameters limits adaptability in sideways markets, where frequent whipsaws diminish returns. Future iterations aim to incorporate reinforcement learning (RL) for dynamic rule adjustments, enabling real-time strategy optimization based on volatility regimes.

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**Authors**
**Puneet Singh** (KIET Group of Institutions) <puneet.2125csai1027@kiet.edu>
Arshit Teotia (KIET Group of Institutions) <arshit.2125csme1044@kiet.edu>
Akshay Karanwal (KIET Group of Institutions) <akshay.2125csai1017@kiet.edu>
Naman Agarwal (KIET Group of Institutions) <naman.2125csme1017@kiet.edu>
Laxman Singh (KIET Group of Institutions) <laxman.mehlawat01@gmail.com>
Rekha Kashyap (KIET Group of Institutions) <rekha.kashyap@kiet.edu>

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