

# Research on Quantitative Strategies with Artificial Intelligence

**Project ID:** 20211014140136

**Execution Period:** March 2021 – April 2022

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## Project Overview:

Based on the analysis and experimentation of historical financial market transaction data, this project integrates knowledge from fluid mechanics, probability and statistics, ordinary and partial differential equations, and finance to extract and establish theoretical models, propose strategic concepts, and then apply the initially developed theoretical strategies back to the data. In actual investment forecasting, the aim is to achieve a transition from theory to practice. According to the results obtained, the process returns to the data experimentation and theoretical analysis stage to adjust the strategy, further improving it with the aid of artificial intelligence algorithms.

## Innovations:

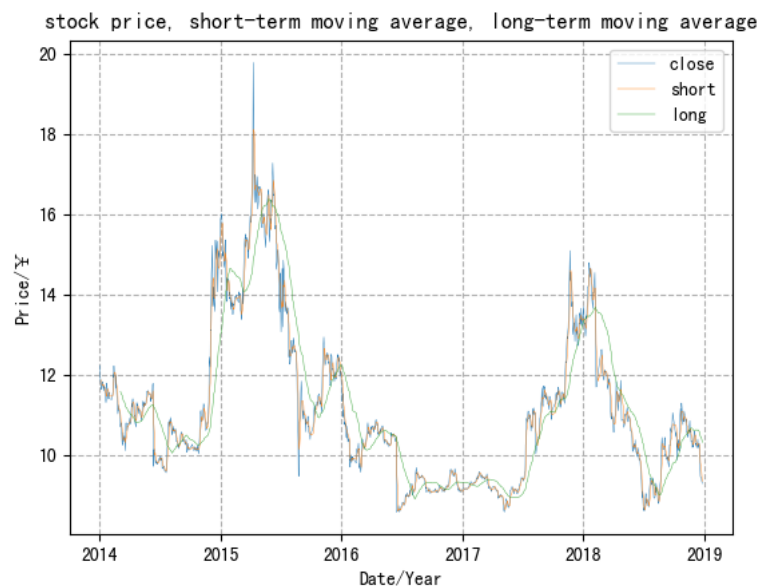
1. Introduced SVM into traditional financial trading.
2. Achieved stable returns.
3. Increased automation over traditional quantitative strategies.

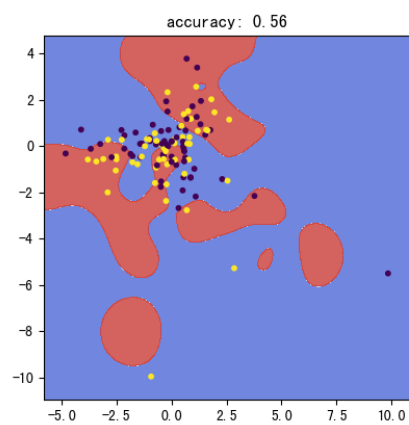
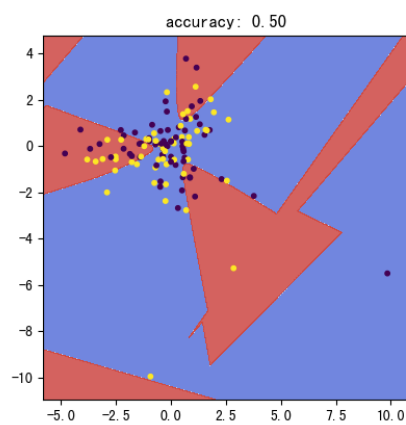
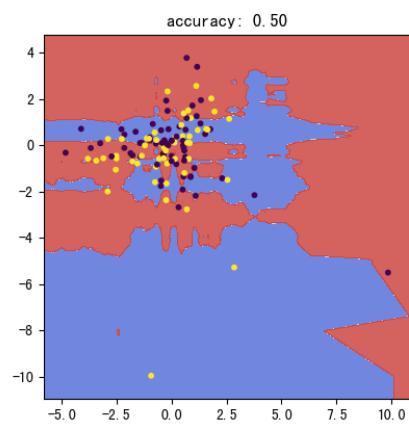
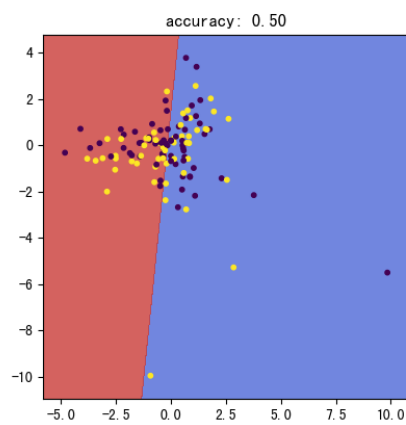
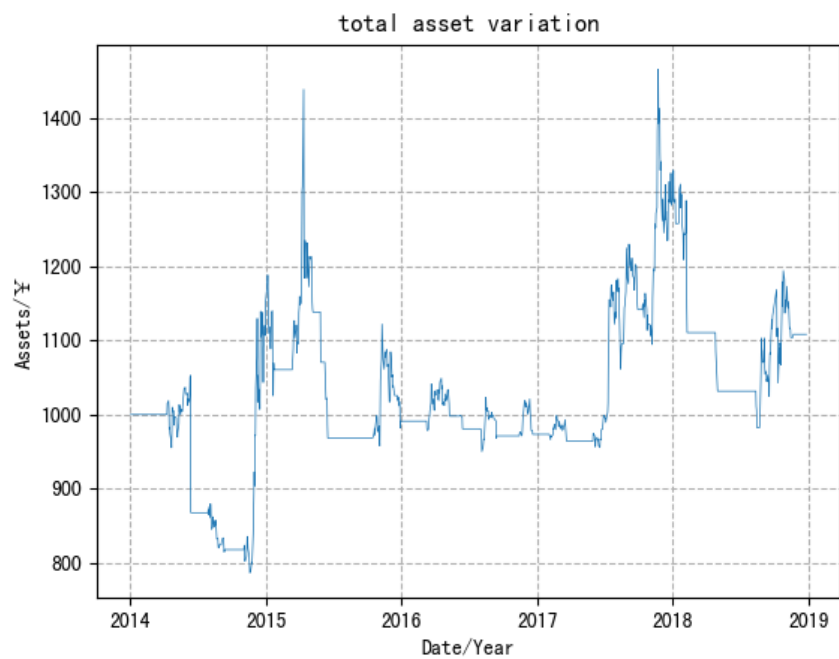
## Results Achieved:

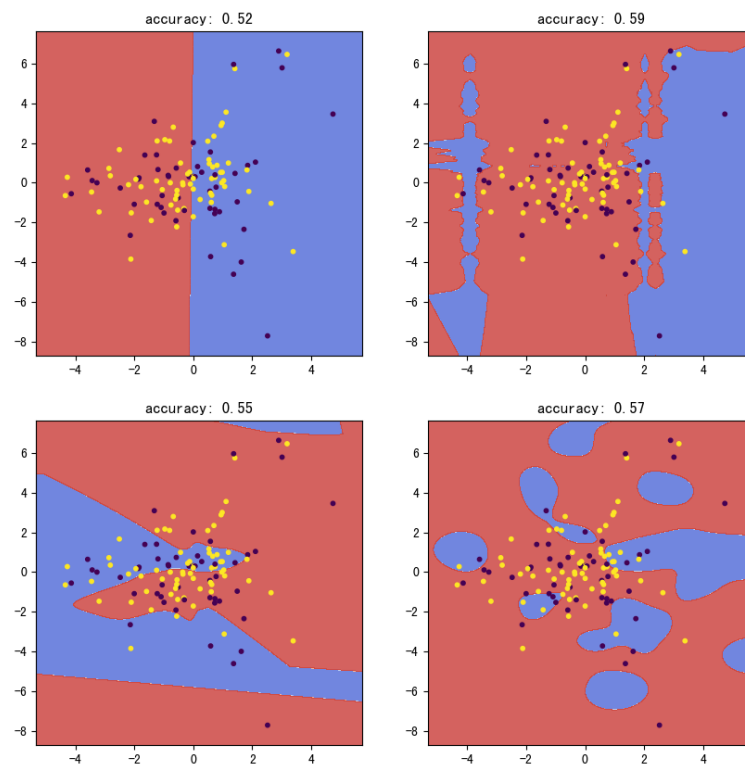
Stable profits using the dual moving average strategy.

## Insights and Reflections:

Harness the power of teamwork, actively engage in scientific research and innovation, engage in self-directed learning, and cultivate innovative capabilities.







- **Figure 1:** Stock price curve for the dual moving average strategy
- **Figure 2:** Asset value change curve for the dual moving average strategy
- **Figure 3:** Returns with AI-based feature judgment (1)
- **Figure 4:** Returns with AI-based feature judgment (2)