

TradingAgents: Multi-Agents LLM Financial Trading Framework

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Paper

Join us!

Code

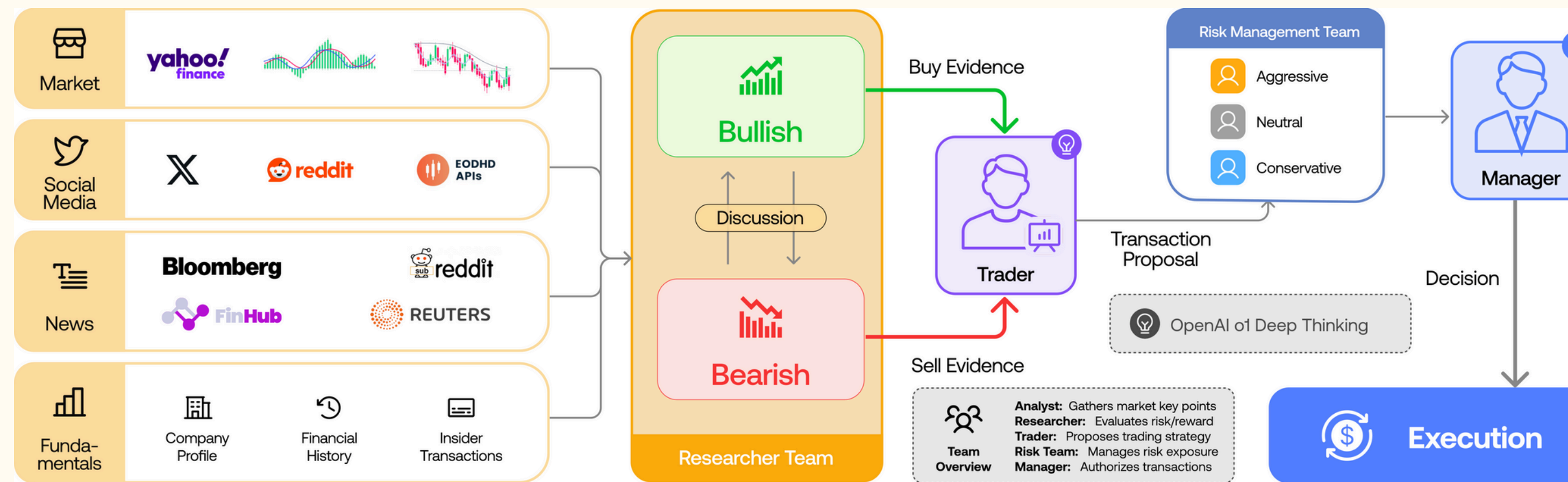
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TradingAgents Overview

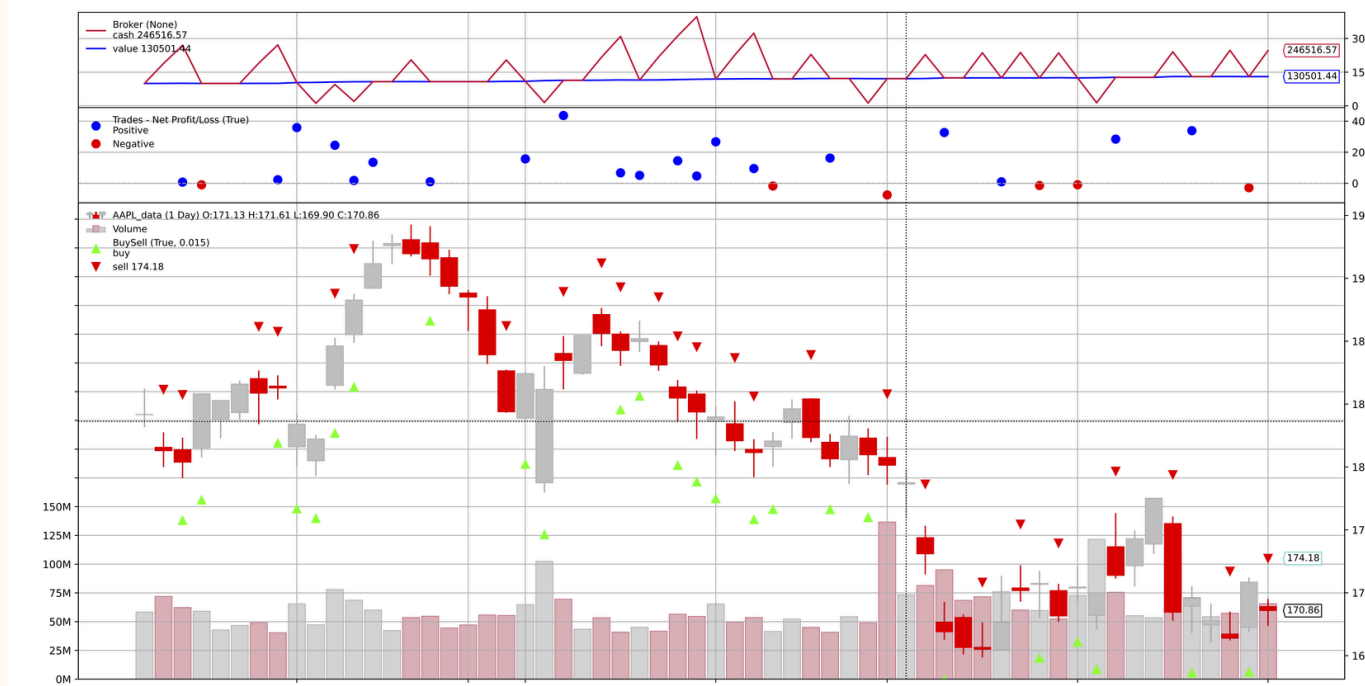
- Novel trading framework **TradingAgents** inspired by real-world trading firms.
- LLM-powered agents in **specialized roles** for financial information preprocessing
- Bull & Bear **researchers** assess market conditions, traders synthesize insights.
- The team of **risk management** ensures controlled exposure.
- Improves trading performance via dynamic collaboration.

Key Features

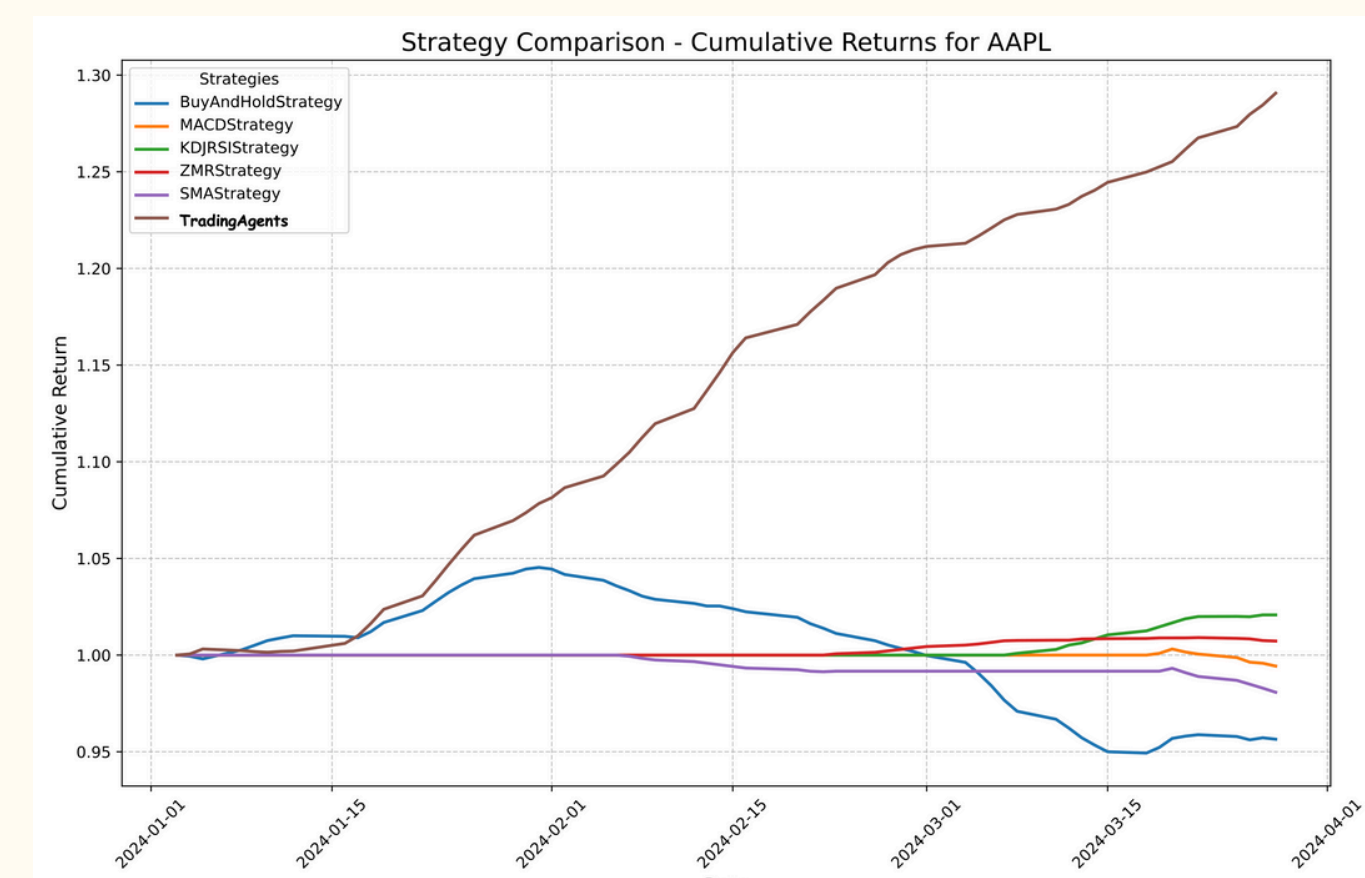
- Structured multi-agent workflow for decision-making.
- Hybrid communication: structured outputs + natural language debates.
- Diverse agent roles (analysts, researchers, traders, risk managers).



Analysts Team	Four analysts concurrently gather relevant market information.
Research Team	The team discusses and evaluates the collected data.
Trader	Based on the researchers' analysis, the trader makes the trading decision.
Risk Management Team	The team assesses the decision against market conditions to mitigate risks.
Fund Manager	The fund manager approves and executes the trade.



TradingAgents Transactions for \$AAPL

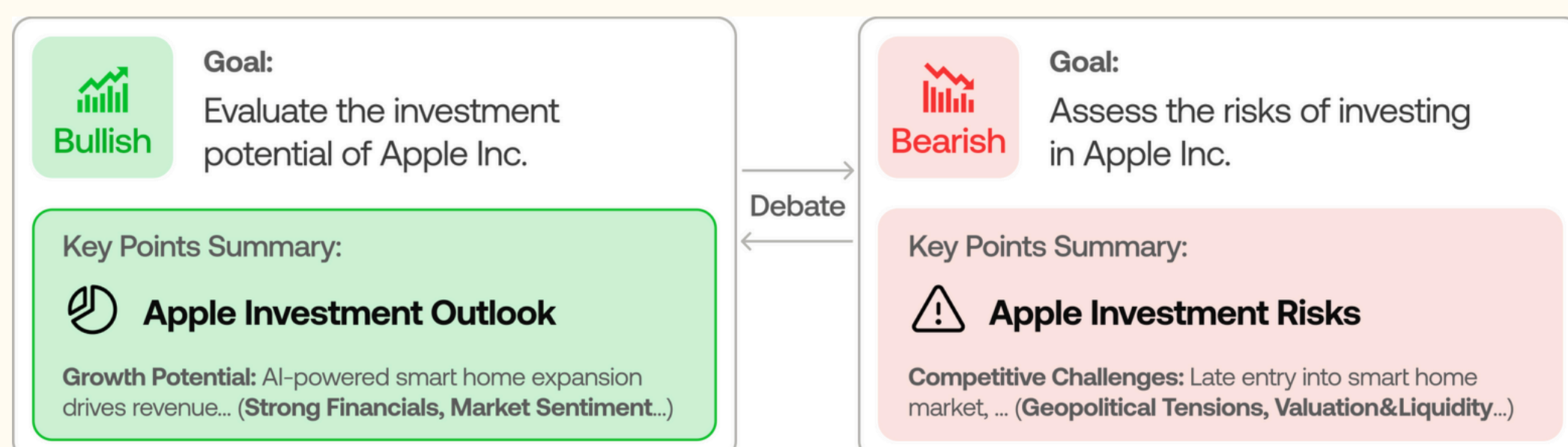


TradingAgents Cumulative Returns

I. Analyst Team

The Analyst Team gathers and analyzes market data across various domains:

- Fundamental Analysts: Assess fundamentals to identify undervalued or overvalued stocks.
- Sentiment Analysts: Analyze social media and public sentiment to gauge market mood.
- News Analysts: Evaluate news and macroeconomic to predict market movements.
- Technical Analysts: Use technical indicators to forecast price trends and opportunities.



II. Researcher Team

Critically evaluates analyst data through a dialectical process, identifying opportunities & risks.

- Bullish Researcher: Highlight positive market indicators & growth potential.
- Bearish Researcher: Focus on risks and negative market signals.

III. Trader Agents

Make decisions based on analyst team reports and research team discussion and evaluations.

- Assessing analyst and researcher recommendations | Determining trade timing and size.
- Executing buy/sell orders | Adjusting portfolios in response to market changes.

IV. Risk Management Team & Manager

Oversees the firm's exposure to market risks, ensuring risk under control.

- Assessing market volatility and liquidity | Implementing risk mitigation strategies.
- Advising Trader Agents on risk exposures | Aligning portfolio with risk tolerance.

