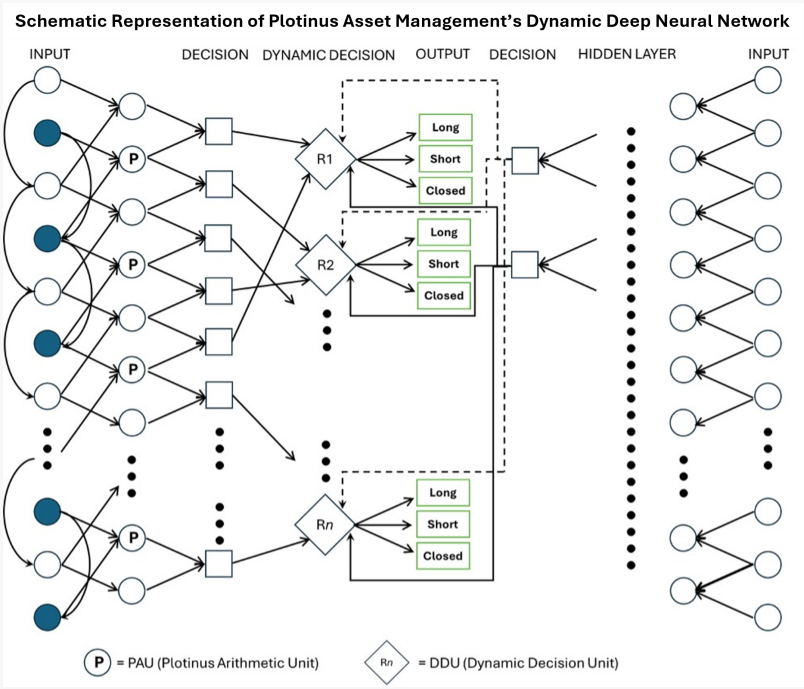
New Research Shows Small Data A.I.'s Advantages for Short-term Trading

Plotinus Asset Management's Small Data A.I. Approach Illustrates a Way to Deal with Asset Management's Data Future-Proofing Problem



Schematic Representation of Plotinus Asset Management's Dynamic Deep Neural Network

GRAND CAYMAN, CAYMAN ISLANDS, September 5, 2024 /EINPresswire.com/ -- As Investors become more aware of the potential that A.I. has to offer the field of active asset management, they are also coming to recognize the problems that its use can bring.

A key area of concern is the conflict between the continually expanding big data required by most A.I. approaches and the necessity to have a consistent, explicable, long-term investment process. With seemingly limitless big data now mushrooming to include questionable A.I.-generated data, it has become almost impossible to future-proof this data's ongoing use or usefulness. Plotinus Asset Management in a new white paper presents the case for a fundamental rethink, proposing a Dynamic Deep Neural Network approach using Small Data. The research was published recently in an Arxiv paper.

Less is more: AI Decision-Making using Dynamic Deep Neural Networks for Short-Term Stock Index Prediction introduces a multi-agent deep-learning method which trades in the futures markets based on the S&P 500 index. The method is not a lab-model, as it is currently deployed as part of Plotinus Asset Management's actively trading Non-Correlated Alpha Controlled Risk Strategy. The approach is an innovation founded on existing, well-established machine-learning models which sample market prices and associated derivatives in order to decide whether the investment should be long/short or closed (zero exposure), on a day-to-day decision. The research compares this method's predictive capabilities with some conventional A.I. machine-learning methods and passive benchmark performance.

To address the big data problem, the method deliberately uses Small Data, restricting its inputs

> Over-reliance on big data exposes A.I. systems to vulnerabilities. Using Small Data demands empirical justification and lends itself to more explicable, more robust A.I. trading decision-making."
>
> *CJ Finnegan*

to only price and volatility data. The A.I.'s Dynamic Deep Neural Network architecture enables the method to develop a contextual understanding of market conditions which it can continuously reassess, rather than conventional time dependent ones.

Plotinus' method is shown to be able to discern when and more importantly when not to trade. Consequently, the method is extremely efficient. In testing it significantly outperformed the passive benchmark by a factor of 4.82, with an exposure to the market of only 41.95% compared to the 100% market exposure of the passive investment.

Thus, providing increased profitability with reduced risk.

ABOUT PLOTINUS

Plotinus Asset Management is regulated by the Cayman Islands Monetary Authority. The firm is registered with the US Commodity Futures Trading Commission and is a member of the US National Futures Association. Its suite of AI-based products is available to investors through its managed futures programs. It also caters to institutional investors who are eligible to invest in offshore funds. See plotinus.ai.

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