

ABSTRACT

An autonomous algorithmic trading artificial intelligence system is provided. The system constantly allocates fund over the assets portfolio at each time interval by not just conditionalizing its actions on past data provided by the market but also internally generated hypotheses of future performances of each asset in the portfolio. The system may retrieve the most recent transaction data of financial markets. The system may forecast, using at least one prediction model, one or more prediction features based on the most recent transaction data. The system may determine using a reinforcement learning based intelligent agent, based on the one or more prediction features and the most recent transaction data, a portfolio weight distribution over a plurality of financial investment products that are traded on the financial markets. The system may initiate a set of transactions on the plurality of financial investment products to achieve the portfolio weight distribution.

FIG. 2