

Predictive Algorithms for Equity Market

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Abstract: *The stock markets all over world have many uncertainties which contain a large amount data with jumps, noises, and movements in leading to the highly non-stationary time series. Here, we introduce real-time financial signal representation and trading techniques as RDNN (Recurrent Deep Neural Network) for the environment sensing and recurrent decision making for the online financial assert trading. In which the RDNN have two parts, first one is DNN (Deep neural network) function of this DNN is feature learning and the second one is RNN (Recurrent Neural Networks) to predict rapidly changing market condition. This proposed model based on two biological related learning concepts such as Reinforcement Learning (RL) and Deep Learning and DL (Deep Learning) is used to represent financial signals and self-taught reinforcement trading. Here, RL is used to interact with deep representations and makes trading decisions to accumulate the ultimate rewards in an unknown environment. It improves the robustness of market summarization using fuzzy learning concepts it reduces the uncertainty of input data. Here, used K-Means for making data static and labeled data, so it makes easy for the MLP to the predicts result. Fuzzy MLP will be using to provide the prediction of stock market.*

Keywords: Deep Neural Network, Direct reinforcement Learning, Fuzzy logic, Multilayer Perceptron Model, Equity Market.

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