Comparative Analysis of Hedge Funds in Financial Markets using Machine Learning Models

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Abstract

The aim of this paper is to layout machine learning models for comparative analysis of hedge funds in financial markets for investments. It has been difficult to compare the hedge fund's performance due to myriad of classification techniques adopted by hedge fund managers such as strategy model, asset class, liquidity score, hence producing disparity in numbers. The machine learning and deep learning neural network models have been effective in exploiting the exogenous and complex data interactions in financial domain datasets and producing useful insights. The author in this paper discusses models such as – semi supervised learning, decision tree learning and hybrid time series classification along with experimental results to juxtapose the hedge funds and hence producing useful results for investments. The analysis shows that the discussed models in the paper can be used for comparative analysis of funds and the hybrid time series classification model is more effective rather than using the semi-supervised and decision tree models individually.

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**Index Terms**

Computer Science Information Systems

**Keywords**

Deep Learning, Machine Learning, Artificial Intelligence, Hedge funds, Financial Markets, Decision Trees, Time Series Classification