Trading Algorithms

CS5800 Final Project - Proposal

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Context

This problem area encompasses one-dimensional time series prediction over a non-stationary dataset (i.e. presumed to include trends and seasonality). Having experience in sound production/recording (mainly music), it is interesting to learn more about one-dimensional time series data because audio channels consist of one-dimensional time series data.

Question

The question we are asking is: "Are there some simple trading algorithms that perform better or worse when applied to historical stock price data?"

Scope

We intend to analyze performance differences among a set of trading algorithms. We will assess the time/memory performance of applying these algorithms and also the real world outcomes, or financial performance.

Description

We have not yet located a data source, but we have briefly discussed some alternative models (e.g. ARIMA).