

# An exploration into the use of Natural Language in Stock Market Prediction\*

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## 1 Introduction

EMH (Fama, 1972)

Random Walk Theory (Magdon-Ismail, Nicholson & Abu-Mostafa, 1998)

## 2 Background and context

Applications

Datasources

Textual Representation

Feature Selection

Machine Learning Algorithms

Findings

## 3 Literature Review

*Not just a summary, criticize and look for questions this research raises*

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## 4 Problem statement and analysis

### Key Research Questions

*Filter it into a question, this is also called maybe a Hypothesis*

### Importance of Research

*Use this chapter to present a clear outline of the problem or issue that you will address, including:*

- Who has responsibility for the problem?*
- What has already been done to try to solve it?*
- What will happen if the problem is not solved?*

## 5 Objective and final outcomes

## 6 Approach

### Datasources

*Check if it is a derived variable, if so, find out how it was calculated, note ALSI gets rebased (last at 2002)*

### Methodology

*What techniques, why these techniques, compare techniques*

**Exploratory Data Analysis**

## **7 Conditions and risk analysis**

**Ethical Consideration**

**Resource Requirements**

**Research Planning**

## **8 Appendix**

## **References**

Fama, E. 1972. American Finance Association, Wiley. 27(3):551–567.

Magdon-Ismael, M., Nicholson, A. & Abu-Mostafa, Y.S. 1998. Financial markets: Very noisy information processing. *Proceedings of the IEEE*. 86(11):2184–2195. DOI: 10.1109/5.726786.