

# Stock forecasting methods and their usage

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**Abstract**—In this paper, we propose several methods to predict future stock prices. There are a lot of algorithms out there but some are more reliable than others. As expected, in most cases the general rule: *"the more complex, the better the prediction"* is true. However there are some relatively easy algorithms than can predict the stock prices of the future quite well. We are going to present and analyze some of these algorithms and take a deeper look into them. Just to make this clear, there is not a single algorithm out there, than can predict the future of a stock 100% correctly. The relationships of the global stock market are to complex to bring them down in a single computer program. We will show the experimental results we got with several algorithms and compare them. Also we will take a short look into investment strategies based on these forecasts and take a look at the results.

**Keywords**—stock, forecast, paper, algorithms.

## I. INTRODUCTION

There is a huge variety of methods that are used in forecasting stock prices. Many of the algorithms that have been made-up just use structured data like tables with old stock prices in it. The aim of all these algorithms is to maximize the profit while holding the risk as low as possible. Since the stock market is global, there are many relationships between stocks. Some of them are paired with others so if the price of one stock goes down, the other stock will follow this trend.

One very important thing that has to be observed are the international newscasts. If the global economy, or even the economy of a single country is going down, the stock market will sooner or later follow that trend. But this trends are most likely to be relatively slow and easy to predict even looking at the stock prices itself. What is more dangerous are catastrophes. After a catastrophe there is often a low point on the stock market. This low point comes so fast, that only algorithms that observe the news have a chance to not make huge losses.

In this paper we are going to compare some algorithms and their functionality. We also like to share some of our experimental results we had with there algorithms. We only used algorithms that do not take global news in account because we wanted to see, how good the algorithms were in an isolated environment analyzing past prices only. We decided to do it that way, because the algorithms themselves should work properly and the newscrawler would be an easy addition to these working algorithms.

## A. Subsection Heading Here

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## II. CONCLUSION

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## APPENDIX A

### PROOF OF THE FIRST ZONKLAR EQUATION

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