

TIME SERIES BASED RISK ANALYSIS APP FOR CRYPTOCURRENCY TRADING

Group 5



GROUP 5 MEMBERS

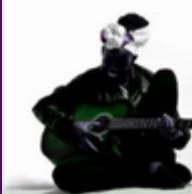
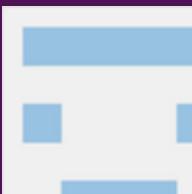
1	Matthews Trevor	 Vetre23 - Overview Vetre23 has 69 repositories available. Follow their code on GitHub. GitHub
2	Stephen Waweru	 stendewa - Overview Data Scientist with experience in several projects and the Logistics industry - stendewa GitHub
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4	Lilian Muli	 mwikali24 - Overview mwikali24 has 147 repositories available. Follow their code on GitHub. GitHub
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INTRODUCTION

- As the cryptocurrency market grows, investors face increasing challenges in making informed trading decisions.
- Our proposed application, CryptoRisk Analyzer.

BUSINESS PROBLEM

- Analyze and predict trends in cryprocurrency markets using historical data.
- Create a web application to show the predictions of the cryptocurrency prices.

PROJECT BENEFITS

- Informed Decision-Making.
- Real-Time Updates
- Risk Management

TARGET AUDIENCE

1. Individual investors .
2. Financial advisors and analysts.
3. Educational platforms .

PROJECT OBJECTIVES



Time Series Analysis

Machine Learning Integration

Risk Assessment Metrics

Cryptocurrency Comparison

User-Friendly Interface

DATA MODELLING

The models used are:

- * ARIMA ➤ Auto Regressive Integrated Moving Average
- * SARIMA ➤ Seasonal Auto Regressive Integrated Moving Average
- * Prophet Time Series Model

We concluded on
the prophet Time
Series Model



CONCLUSION

- The low MAE {0.0271} and RMSE values{0.0320} indicate that the prophet model delivers accurate forecast for our dataset.
- This metrics demonstrates the model's ability to effectively capture underlying trends and patterns, resulting in minimal prediction errors.

THE END