VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi, Karnataka-590018



A Mini Project Report On

"STOCK MARKET PRICE PREDICTION USING MACHINE LEARNING"

Submitted in partial fulfillment of the requirements for the Award of Degree of Bachelor of Engineering in Computer Science and Engineering

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CERTIFICATE

This is to certify that Mini Project report entitled "STOCK MARKET PRICE PREDICTION USING MACHINE LEARNING" has been carried out by HAMSA D M [4GK21CS016], MADHUSHREE C K [4GK21CS020], PRIYANKA B R [4GK21CS034], SHIVAYOGI A M [4GK21CS038], for the partial fulfilment of Bachelor of Engineering in Computer Science and Engineering of Visveswaraya Technological University, Belagavi during the year 2023-24. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The Mini Project work report has been approved as it satisfies the academic requirements in report of mini Project prescribed for the semester.

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DECLARATION

We, HAMSA D M [4GK21CS016], MADHUSHREE C K [4GK21CS020], PRIYANKA B R [4GK21CS034], SHIVAYOGI A M [4GK21CS044], are respectively studying in the 6th semester of Bachelor of Engineering in Computer Science at K R Pete Krishna Government Engineering College K R Pet, Mandya. Hereby declare that the mini project entitled "STOCK MARKET PRICE PREDICTION USING MACHINE LEARNING"

has been carried out under the guidance of Dr. Hareesh K Associate Professor Department of CSE for the partially fulfilment of Bachelor of Engineering in Computer Science and Engineering of Visveswaraya Technological University, Belagavi during the year 2023-24. Belagavi during the academic year 2023-24.

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ABSTRACT

Predicting stock market prices is a complex challenge that has long intrigued researchers and investors alike. This project explores the application of machine learning techniques to forecast stock market trends and prices with increased accuracy. We employ a range of supervised learning algorithms, including linear regression, decision trees, random forests, and advanced neural networks, to analyze historical stock price data and identify predictive patterns. The project integrates data preprocessing steps such as normalization, feature selection, and time series analysis to enhance model performance. By leveraging historical price data, trading volumes, and macroeconomic indicators, we aim to build a robust predictive model that can adapt to evolving market conditions. The performance of the models is evaluated using metrics such as mean squared error (MSE) and accuracy to determine their effectiveness in predicting future stock prices. The results suggest that machine learning models, particularly deep learning approaches, can offer valuable insights and improve forecasting accuracy compared to traditional methods. This research contributes to the field of financial analytics by demonstrating the potential of machine learning in making more informed investment decisions and optimizing trading strategies.

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