A PROJECT REPORT ON

"STOCK MARKET PREDICTION USING MACHINE LEARNING"





Submitted in partial fulfillment for the award of the degree of

Masters of Information Technology By

SAGEER YOUSF PANDITH - 18088110029 ASIF HUSSAIN - 18088110022 UMAR ASHRAF - 18088110027 VAZEERA - 18088110034

Under the guidance of

Dr. MAJID ZAMANHOD (Information Technology)

DIRECTORATE OF INFORMATION TECHNOLOGY AND SUPPORT SYSTEM

CERTIFICATE

PREDICTION USING ML" is a bonafide work carried out by SAGEER YOUSF PANDITH, ASIF HUSSAIN, VAZEERA AND UMAR partial fulfillment for the award of Masters in information technology of the Information Technology Department of Kashmir University during the year 2018-2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said Degree.

Signature of Guide Signature of Director
(Dr. Majid Zaman) (Dr. Maroof Qadri)

ABSTRACT

Stock is an unpredictable curve. Prediction in stock market is covered with the complexity and instability. The main aim for the persuasion of the topic is to predict the stability in the future market stocks. Many researchers have performed their research on the movement of future market evolution. Stock consists of fluctuating data which makes data as an integral source of efficiency. Impact on the same chances the efficiency of the prediction. In the recent trend of Stock Market Prediction Technologies machine learning has integrated itself in the picture for deployment and prediction of training sets and data models. Machine Learning employs different predictive models and algorithms to predict and automate things of requirement. The Paper focuses on the use of Regression and LSTM to predict stock values.

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any

task would be impossible without the mention of the people who made it

possible, whose constant guidence and encouragement crowed our efferts with

success.

I have great pleasure in expressing my deep sense of gratitude to **Dr. Maroof**

Qadri, Director of information Technology and Support System Kashmir

University for providing necessary infrastructure and creating good

environment.

I express my gratitude to **Dr. Majid Zaman**, my project guide, for constantly

monitoring the development of the project and setting up precise deadlines. Her

valuable suggestions were the motivating factors in completing the work.

Finally a note of thanks to the teaching and non-teaching staff of Dept of

Computer Science and Engineering, for their cooperation extended to me, and

my friends, who helped me directly or indirectly in the course of the project

work.

SAGEER YOUSF PANDITH - 18088110029

ASIF HUSSAIN – 18088110022

UMAR - 18088110027

VAZEERA AKHTER - 18088110034

CONTENTS

AE	STRAC	T	
A	CKNOW		
LI	ST OF F		
LI	ST OF T		
•	INTRO		
	•	INFORMATION ON STOCK	1-8
	1.2.	PROBLEM DEFINITION	
	1.3.	PROJECT PURPOSE	
	1.4.	PROJECT FEATURES	
	1.5.	MODULES DESCRIPTION	
•	LITE		
	•	MACHINE LEARNING	9-17
	2.2.	TECHNICAL SURVEY	
	2.3.	EXISTING SYSTEM	
	2.4.	PROPOSED SYSTEM	
	2.5.	SOFTWARE DESCRIPTION	
•	REQ	UIREMENT ANALYSIS	
	•	FUNCTIONAL REQUIREMENTS	18-19
	3.2.	NON FUNCTIONAL REQUIREMENTS	
	3.3.	HARDWARE REQUIREMENTS	
	3.4.	SOFTWARE REQUIREMENTS	
•	DESI	GN	
	•	DESIGN GOALS	20-23

4.2. SYSTEM ARCHITECTURE	
4.3. USE CASE DIAGRAM	
4.4. DATA FLOW DIAGRAM	
• IMPLEMENTATION	24-28
• TESTING	29-34
• SNAPSHOT	35-38
• CONCLUSION	39-40
REFERENCE	41

Fig no.	Fig.Name	Page no.
2.1.	Supervised Learning	11
•	Unsupervised Learning	12
•	Reinforcement Learning	13
•	System Flow	16
•	System Architecture	21
•	Use Case Diagram	22
•	Data Flow Diagram	23
6.1	The Testing Phase	30
•	Data Extraction and Plot	35
•	Linear Regression	36
•	Long Short Term Memory	36
•	KKN Algorithm	37
•	Sample Data	37
•	Comparison of different Components	38

Table	no.	Table Name	Page no.
6.1		Test Case -1	32
6.2		Test Case -2	33
6.3		Test Case -3	34