



## NARASARAOPETA ENGINEERING COLLEGE

(AUTONOMOUS)

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2021-2022

<b>BATCH NUMBER</b>	CG9
<b>TEAM MEMBERS</b>	N. Vasanthi(20471A05G7) A. Janaki (20471A05D3) Y. N. L. M. Susmitha(20471A05J4)
<b>GUIDE</b>	SK. Khaja Mohiddin Basha, M. Tech
<b>TITLE</b>	Cryptocurrency Price Prediction
<b>DOMAIN/TECHNOLOGY</b>	MACHINE LEARNING
<b>BASE PAPER LINK</b>	<a href="https://ieeexplore.ieee.org/document/10250584">https://ieeexplore.ieee.org/document/10250584</a>
<b>DATASET LINK</b>	<a href="https://www.kaggle.com/code/meetnagadia/bitcoin-price-prediction-using-lstm/input">https://www.kaggle.com/code/meetnagadia/bitcoin-price-prediction-using-lstm/input</a>
<b>SOFTWARE REQUIREMENTS</b>	Operating system : windows-11, 64 bit OS Coding language : Python (COLAB) Browser : Any Latest Browser like Chrome
<b>HARDWARE REQUIREMENTS</b>	Processor : intel@corei7-7500UCPU@2.70gh Cache memory : 4 MB System type : 64-bit operating system, x64-based processor RAM : 16 GB

## **ABSTRACT**

Considering the growing interest, in cryptocurrency, Bitcoin and the need to manage risks in market conditions a research study has been conducted to predict Bitcoin prices. To tackle the complexities of cryptocurrency markets the study utilizes Long Short Term Memory (LSTM) a type of network known for its ability to identify patterns in data over long periods. The research leverages Bitcoin stock queries along with price and trading data integrating them with Yahoo Finances dataset. This integration likely includes indicators, market sentiment analysis or relevant data that enhance the LSTM models understanding of what influences Bitcoin prices. By exposing the LSTM model to sequences of data during training it can discern patterns and relationships necessary for accurate predictions. The goal is to provide investors with insights into Bitcoin prices through these assessments and assist in decision making while minimizing financial risks. The study acknowledges that predicting cryptocurrency prices is challenging due to market volatility but emphasizes that leveraging network architectures like LSTM and comprehensive financial data from platforms such as Yahoo Finance can lead to more informed analyses and forecasts, in this dynamic landscape of cryptocurrency investments.