RAIN FALL PREDICTION-INDIA

CAPSTONE PROJECT

PG CERTIFICATION IN AI-ML AND DATA SCIENCE BY IIT ROORKEE

CONTENTS

OBJECTIVE

- Collect Historical districtwide Rainfall data
- Analyze the data to find insights and correlation
- Model Selection
- Train Model
- Validation

PURPOSE

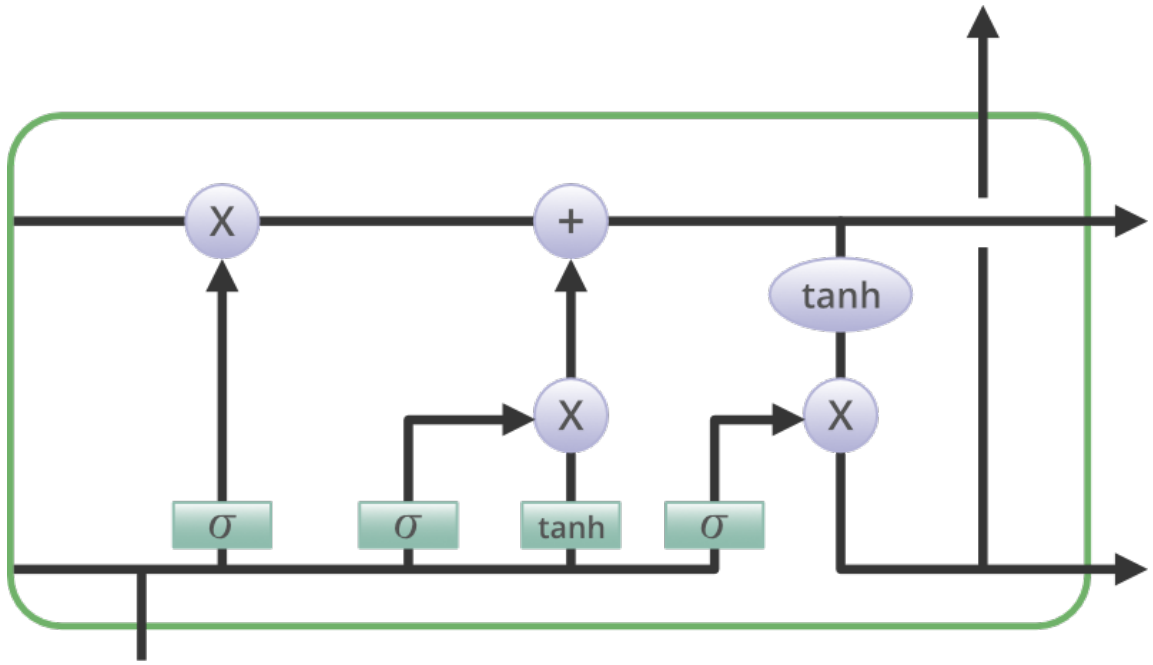
- Prediction of rainfall can be beneficial for many sectors like Agriculture- Crop selection, Government - Disaster Management, Food Security.
- It is possible to achieve with the help of AI and historical data

APPROACH

- Selecting model
- LSTM Model Selection

MODEL SUMMARY

- Long Short-Term Memory (LSTM) is a type of recurrent neural network (RNN) architecture designed to address the vanishing gradient problem and capture long-term dependencies in sequential data.



RESULT

- Code https://github.com/psterdale/dsaiml-capstone

INFERENCE

REFERENCES

- Dataset:

https://www.kaggle.com/datasets/rajanand/rainfall-in-india

- LSTM Blog:

https://machinelearningmastery.com/how-to-develop-lstm-models-for-time-series-forecasting/