

CRUDE OIL PRICE PREDICTION

INTRODUCTION

Crude oil is among the main assets in this day and age, it is the central fuel and its expense straightforwardly affects the worldwide environment, our economy and oil investigation, abuse and different exercises. Expectation of oil costs has turned into the need of great importance, it is a shelter to numerous huge and little ventures, people, and the public authority.

As a vital info figure modern creation, the value unpredictability of raw petroleum frequently achieves monetary unpredictability, so estimating raw petroleum cost has forever been an urgent issue in financial matters. In our review, we built a LSTM (short for Long Momentary Memory brain organization) model to lead this determining in view of information.

Literature Survey

S.no	Author	Title	objective
1.	Nidhi Moitra et al. (2020)	Crude Oil Price Prediction Using Lstm [1]	In this paper, Recurrent neural networks that are LSTM-based are used to predict the price of crude oil. The most effective and powerful models for processing time-series-based sequential data are recurrent neural networks (RNNs). In addition to prediction, LSTM variations can be utilised for tasks including polyphonic modelling, speech recognition, and handwriting recognition.
2	Varun Gupta et al. (2018)	Crude Oil Price Prediction Using LSTM Networks [2]	In this study, For the objective of predicting the price of crude oil, LSTM-based recurrent neural networks have been utilised. One of the most

			effective RNN architectures is LSTM. The hidden layer of the network's LSTM introduces the memory cell, which making them well-suited to grasp the changing structure of data with a high capacity for prediction.
3	Zhenda Hu et al. (2021)	Crude oil price prediction using CEEMDAN and LSTM-attention with news sentiment index	This paper combines Complete Ensemble Empirical Mode Decomposition with Adaptive Noise (CEEMDAN), Long Short-Term Memory (LSTM) with attention mechanism and addition, following the well-known “decomposition and ensemble” framework to study the crude oil prices
4	Kexian Zhang et al. (2022)	Forecasting crude oil price using LSTM neural networks	An ANN (short for Artificial Neural Network) model and a typical ARIMA (short for Autoregressive Integrated Moving Average) model are taken as the comparable models. The results show that the LSTM model has strong generalization ability, with stable applicability in forecasting crude oil prices with different timescales.
5	Shaolong Sun et al. (2021)	Analysis and forecasting of crude oil price based on the variable selection-LSTM integrated model	This paper assesses and selects core influence factors with the elastic-net regularized generalized linear Model (GLMNET), spike-slab lasso method, and Bayesian model average (BMA) and the new machine learning method long

			short-term Memory Network (LSTM) is developed for crude oil price forecasting.
6	<u>Norshakirah Aziz</u> et al. (2020)	Predictive analytics for crude oil price using rnn-lstm neural network	This study demonstrated the use of RNN-LSTM networks for predicting the crude oil price based on historical data alongside other technical analysis indicators. This study aims to certify the capability of a prediction model built based on the RNN-LSTM network to predict the future price of crude oil.
7	Rayan H. Assaad et al. (2021)	Predicting the Price of Crude Oil and its Fluctuations Using LSTM, and Convolutional Neural Networks	Deep neural networks, long-short term memory (LSTM) neural networks, and a combination of convolutional and LSTM neural networks are being used here. The findings suggest that LSTM networks are the best architectures to predict the crude oil price. The outcomes of this paper could potentially help in making the oil price prediction mechanism a more traceable.
8.	Kaijian He et al. (2017)	Forecasting Crude Oil Prices: a Deep Learning based Model	In this paper, we use the deep learning model to capture the unknown complex nonlinear characteristics of the crude oil price movement. We further propose a new hybrid crude oil price forecasting model based on the deep learning model
9.	Rajesh Prasad et al. (2020)	CPPCNDL: Crude oil price prediction using complex network and deep learning algorithms	This paper proposed a hybrid model for crude oil price prediction that uses the complex network analysis and long

			short-term memory (LSTM) of the deep learning algorithms. The complex network analysis tool called the visibility graph is used to map the dataset on a network and K-core centrality was employed to extract the non-linearity features of crude oil and reconstruct the dataset.
10.	Lin Yao et al. (2021)	Prediction of Oil Price Using LSTM	In this paper, we selected the LSTM algorithm to do the oil price's prediction, to reach good results. RMSE and MAE are selected to represent the prediction's precision. In this paper, we use a two-layer LSTM network, and the Dense layer is used for the output layer

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