

Study and Implementation of Machine Learning Use Cases on Time Series Data for Predictive Analysis

Abstract

Abstract: Time series data is central to many industries, and machine learning (ML) has become a valuable tool for predictive analysis. This project explores the application of ML models such as ARIMA, LSTM, and Prophet for analysing time series data to make accurate forecasts and optimize operational efficiency. By applying these models to real-world use cases like sales forecasting, energy demand prediction, and predictive maintenance, the project aims to enhance decision-making and improve efficiency through accurate predictions. The focus will be on model selection, implementation, and evaluation of performance in predicting trends and patterns from historical data.

Academic Project Requirements:

1) Required No. of student(s) for academic project: 2

2) Name of course with branch/discipline: B.E./B.Tech. Computer Engineering/IT/MCA

3) Academic Project duration:

(a) Total academic project duration: 16 Weeks

(b) Student's presence at IPR for academic project work: 5 Full working Days per week

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