Ideation Phase
Literature Survey

Date	17 October 2020
Team ID	PNT2022TMID18385
Project Name	Project - **Car Resale value Prediction**
Maximum Marks	4 Marks

1.Title: Machine learning for enterprises: Applications, algorithm selection, and challenges

Publisher :Elsevier

Year:2020

Authors: In Lee a, Yong Jae Shin

Abstract Machine learning holds great promise for lowering product and service costs, speeding up business processes, and serving customers better. It is recognized as one of the most important application areas in this era of unprecedented technological development, and its adoption is gaining momentum across almost all industries. In view of this, we offer a brief discussion of categories of machine learning and then present three types of machine-learning usage at enterprises. We then discuss the trade-off between the accuracy and interpretability of machine-learning algorithms, a crucial consideration in selecting the right algorithm for the task at hand. We next outline three cases of machine-learning development in financial services. Finally, we discuss challenges all managers must confront in deploying machine-learning applications.

Inference: This paper discuss the trade-off between the accuracy and interpretability of machine-learning algorithms, a crucial consideration in selecting the right algorithm for the task at hand

2.Title: Multiple Linear Regression Model for Improved Project Cost Forecasting

Publisher: ELSEVIER

Year:2022

Authors: Filippo Maria Ottaviania Alberto DeMarcoa

Abstract:

Several studies have been conducted in the Project Management field further to improve the Earned Value Management (EVM) methodology to forecast the project cost estimate at completion (EAC). This work aims at developing a linear model to increase the accuracy of the standard EAC and minimize the variance of the error. The research is conducted on an EVM data set comprising 29 real-life projects for a total of 805 observations. Multiple linear regression analysis is performed to evaluate the number of regressors, the priority of the candidate EVM variables into the regression model, and to assess the diagnostics of the model fit. The new EAC formulation is benchmarked, the results show the model to provide higher accuracy and lower variance compared to the standard formulation

Inference: This paper proposed aims at developing a linear model to increase the accuracy of the standard EAC and minimize the variance of the error.

3)Title: **Second-hand Car Price Prediction Based on a Mixed-Weighted Regression Model**

Publisher: IEEE

Year:2022

Author: Shengqiang Han, Jianhua Qu, Jinyi Song, Zijing Liu

Abstract: With the development of motor vehicles, the circulation demand of motor vehicles in the form of "second-hand cars" in circulation links is increasing. As a special "e-commerce commodity", second-hand cars are more complicated than ordinary e-commerce commodities. As a result, it is difficult to estimate the price of second-hand cars, which is not only influenced by the basic configuration of the car, but also by the car conditions. At present, the state has not issued a standard to judge the value of second-hand car. To solve this problem, in this paper, first making feature engineering, which includes data preprocessing and feature screening. Data preprocessing includes data cleaning and data transformation, data cleaning includes removing outliers and filling missing values, and data transformation is used to unify data format to improve data quality. The feature screening includes correlation analysis and feature extraction based on LightMBG, and the screened features provide the basis for model building, training and prediction. Then, five regression models are constructed by using the feature attributes obtained by the feature engineering for training, and evaluated. Then, Random Forest and XGBoost are weighted and mixed to got a novel regression model, and the effect of the model is better than that of the five regression models. Finally, the novel regression model is used to predict the price of second-hand cars..

Inference: The proposed model utilizes random forest and decision tree algorithm

4)Title: Comparison of Multiple Machine Learning Models Based on Enterprise Revenue Forecasting

Publisher: IEEE

Year:2021

Authors: Huang Lei, Huang Cailan

Abstract: Enterprise operating income is an important part of enterprise revenue. It is of great reference significance to realizethepredictionofcorporateincomeforcorporateoperating income management. However, the corporate income forecast process of most companies is time-consuming and error-prone because corporate revenue forecasts are calculated manually by hundred of financial analysts. Moreover, it is also difficult to forecast through traditional statistical methods because of the data noise that usually exists in such data, as well as the high dimensionality of the data. At the same time, the data set used in this paper is relatively small, so models such as neural networks with more strict data volume requirements are not suitable. To address the above problems, this paper proposes to use multiple models such as support vector machines to predict the business revenue data of enterprises on the basis of relatively controllable model complexity. And then, the prediction ability of the models is evaluated relatively reasonably using three indexes, mean absolute error (MAE), root mean square error (RMSE), and absolute error value (MAPE)

Inference: This paper proposes to use multiple models such as support vector machines to predict the business revenue data of enterprises on the basis of relatively controllable model complexity

5)Title: An Automated Car Price Prediction System Using Effective Machine Learning Techniques
Publisher: IEEE

Year:2022

Authors: Santosh Kumar Sat apathy, Rutvikraj Vala ,Shiv Virpariya

Abstract This research focuses on Building a mathematical model that could predict the price of a second-hand car based on its current features. Determining the price of a used automobile is a difficult task because several factors like Current Mileage, Current Condition, Make, Year, etc., can influence the prediction prices of an automobile. And, from the perspective of a person who sells, it becomes a dilemma to predict the price of a second-hand car accurately. Thus, the point of interest of this challenge is in growing gadgets, studying models that can correctly expect the price of a used car primarily based on its capabilities. Due to this, in turn, a consumer can make a much more informed purchase. Therefore, We will be implementing and examining various Machine Learning Techniques with Data Analysis to Provide an Accurate and Easy to use solution.

Inference: This model utilize various Machine Learning Techniques with Data Analysis to Provide an Accurate and Easy to use solution