UNIVERSITY SCHOOL OF INFORMATION, COMMUNICATION AND TECHNOLOGY

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TERM PAPER SYNOPSIS FOR

CAR PRICE PREDICTION

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MCA (SE) - 1st year

SYNOPSIS

TITLE

CAR - PRICE PREDICTION

Abstract:

In this paper, we presents a machine learning-based approach for predicting car prices in the used car market. The objective of this study is to develop an accurate and reliable model that can assist both buyers and sellers in estimating the fair market value of vehicles. Car sales value are determined by various attributes, such as make, model, year, mileage, and condition so on. Using this dataset, we applied machine learning algorithms like regression algorithms, including Random Forest and Gradient Boosting, to train and evaluate our prediction model. This results indicate that the model achieved a high level of accuracy, with a mean absolute error of less than 5% on the test dataset.

This paper contributes to enhancing decision-making processes within the automotive industry, aiding users in selecting the most suitable algorithm for optimizing car pricing strategies and the usage of existing machine learning algorithms on datasets and tries to implement this prediction engine for real-life usage by users. Furthermore, it provides sufficient proof of what algorithm is best suitable for this task.

REFERENCE

- 1. Flach, P. (2015). Machine Learning: The Art and Science of Algorithms that Make Sense of Data. Cambridge
- 2. https://www.kaggle.com/datasets/hellbuoy/car-price-prediction?select=CarPrice_Assig_nment.csv