

## INFORMATICS INSTITUTE OF TECHNOLOGY

In collaboration with

## UNIVERSITY OF WESTMINSTER

## Price Prediction on Finding Retail Prices of Used Motorbikes

Final Thesis

A dissertation by

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## **Abstract**

The motorcycle is one of the most popular modes of transportation methods because it is a fast, cheap, and convenient mode of transportation. To make a reliable and accurate prediction, many distinct attributes are examined. This thesis presents about Motor Bike prediction system by using the supervised machine learning techniques. Pricing of the motorcycles is one of the major concerns for motorcycle Sellers. The main purpose of this study is to construct a model to determine the price of motorcycle based on significant factors and various features of selected Motorcycle from secondary data sources such as. 'Motorcycle brand, 'Model', 'Year', 'Owner Type', 'Transmission' were the significant factors which were used & helpful to find the correct values. The proposed method created by the author has adaptive features, predictive analysis components based on statistical algorithms and machine learning. The Prototype for the web application has been made which can be easily understood by the end-user. When launching the application, it will be given startup introduction what is required to be done before making a prediction. A Questionnaire was sent to target group to test the prototype and to see If there needed to be updates, hoping the Enduser will have a positive effect. The functional and non-functional criteria were put to test, with positive results. This Study shows the accuracy level can be improved in prediction model.

Key words: Machine Learning, Motorcycle, prediction, Decision tree, Random Forest, regression