



Senior Design Project

Real Estate Company Beater Price Prediction Using Machine Learning

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Spring, 2021

Declaration

This is to declare that no part of this report or the project has been previously submitted elsewhere to fulfill any other degree or program. Proper acknowledgment has been provided for any material that has been taken from previously published sources in the bibliography section of this report.

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Approval

The Senior Design Project entitled “**Real Estate Company Beater Price Prediction Using Machine Learning**” by Md. Nur-E-Azam (ID:1512268042), Md. Reaz Islam (ID: 1520663042), and Hridoy Saha (ID:1611520042) has been accepted as satisfactory and approved for partial fulfillment of the requirement of BS in CSE degree program on Summer, 2020.

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Acknowledgment

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Is it possible to predict real estate house predictions effectively using Machine learning algorithms and advanced data mining tools.

Abstract

The below document presents the implementation of price prediction project for the real estate markets and housing. Many algorithms are used here to effectively increase the accuracy percentage, various researchers have done this project and implemented the algorithms like hedonic regression, artificial neural networks which is considered as the best models in the price prediction. These are considered as the base models and by the help of advanced data analysis tools algorithms like a random forest, gradient boosted trees, multi layer perceptron and ensemble machine learning models are used and prediction accuracy is attained in a higher rate. The results and evaluation of these models using the machine learning and advanced data analysis tools like pandas will have the more influence in the price prediction.

Keywords: Random Forest, DecisionTreeRegressor, Linear Regression, Gradient Boosting Regressor, Multi layer perceptron, price prediction, Python, Sklearn, Pandas, NumPy, Machine learning, Advanced ML Algorithm and Model.