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BOSTON HOUSING PRICE PREDICTION

Motivation

We plan to predict the housing prices in Boston. Boston has a competitive and dynamic real estate market, and accurate price prediction can help buyers, sellers, and real estate agents make informed decisions. Predicting housing prices is a challenging task due to various factors like location, size, number of rooms, accessibility to transportation etc. Our goal is to develop a machine learning model that can accurately predict the prices of houses in Boston using a dataset of housing prices and various features that can impact the prices.

Method

We plan to use a regression-based machine learning technique to predict housing prices. Regression is a commonly used technique in data science for predicting a continuous variable, such as housing prices. We will also use feature selection techniques to identify the most important and/or least important features that impact housing prices. Additionally, we will also use certain preprocessing techniques to clean our data from missing values and outliers at the start.

Dataset

The Boston Housing Dataset is a popular and widely used dataset in the machine learning community. It contains information on various features of houses and their corresponding towns in Boston and their corresponding prices. The dataset includes 506 observations and 14 variables. The variables include features like the number of rooms, crime rate, pupil-teacher ratio, and more. The dataset is suitable for regression analysis, making it a good pick for our problem of predicting housing prices.