

COMPARISON OF MARKET VALUE PREDICTION MODELS: MULTIPLE LINEAR REGRESSION, DECISION TREE, AND NEURAL NETWORKS

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ABSTRACT

Real estate market value is crucial for buyers, sellers, and agents. Accurate predictions can aid agents in listing houses at the best value and supply buyers with current market expectations. The study uses a data set of over 100,000 residential properties sold between 2008-2022 in a California County brokerage. The prediction models will consider internal and external variables, such as the number of bedrooms, bathrooms, pools, solar, and school district. Multiple models will be compared to determine the most effective in forecasting market value. This study aims to improve the accuracy of real estate market value predictions for agents and buyers.

Keywords: Data analytics, Real Estate, Regression, Neural networks, Decision Tree