

PROJECT REPORT

APPROPRIATE HOUSE PRICE PREDICTION USING ORANGE BY COMPARING NEURAL NETWORK AND LINEAR REGRESSION ALGORITHMS

> David Arvianto 17K10021

Faculty of Computer Science Soegijapranata Catholic University 2023

RA

OBGIJA

ABSTRACT

House prices will increase year by year significantly. In order to help sales parties and prospective buyers, the data was looked at house prices from Kaggle, which totals 1460 data. From that data, the best solution will be later found by me in order to determine the selling price of the house using an algorithm. The data is taken from the kaggle website and then downloaded to the computer. Using help from an orange application then data was input. Data separated into tables which the focus of the research will take on. Table house price will be selected as base of the data process and processed using Linear Regression and Neural Network algorithms. The application then will be processed using the MAE and MSE method. After performing and calculating the Algorithmic Performance Comparison Analysis Table which will then be calculated by the user through careful observation that the values of the MAE and MSE of the Linear Regression algorithm are unstable as the input data sample increases. Whereas for the Neural Network algorithm there is a static decrease at each increase in sample data. This refers to the theory of MAE and MSE that the smaller the results obtained, the better the quality of the model. In other words, the Neural Network algorithm will be more effective in managing house price cases than Linear Regression. So this data can be used as a reference for forecasting values for the same case in the future.

