

You are given a dataset containing house sales in a city. Your task is to build AI models that can make the best possible prediction of house price based on house features. You should develop and compare the performance of several models, including support **vector machines**, **decision trees** and **random forest**. Analyse the experiment results to identify the model with the best performance. Provide justification for why such model could achieve the best performance. Evaluate your developed solution for their suitability for deployment in real world applications.

Study Links

[Linear Regression in Python – Real Python](#)

[1.4. Support Vector Machines — scikit-learn 1.5.2 documentation](#)

[From Theory to Practice: Implementing Support Vector Regression for Predictions in Python | by Niousha Rasifaghihi | Medium](#)

[Machine Learning Basics: Decision Tree Regression | by Gurucharan M K | Towards Data Science](#)

[DecisionTreeRegressor — scikit-learn 1.5.2 documentation](#)

[RandomForestRegressor — scikit-learn 1.5.2 documentation](#)

[Random Forests Algorithm explained with a real-life example and some Python code | by Carolina Bento | Towards Data Science](#)