

Task 2 Regression - Machine Learning

Write a Python program that creates three regression models (linear, polynomial, random forest regressors) for **recs2009_public.csv** dataset. The dataset contains information on houses in the different regions of the USA.

You should take two predicted labels related to energy consumption and money spent for resource (for example, you can take TOTALDOLSPH – Total cost for space heating, in whole dollars, 2009, KWHSPH – Electricity usage for space heating, in kilowatt-hours, 2009).

To solve the task, you can select any set of features and use any classifier you wish. But you should explain why you select them.

Examine some parameters of the models used to find the best set of parameters and avoid overfitting.

Write a short report contains the program and the results (some regression performance metrics: R^2 , MSE, MAE) obtained.