

Applied Maschine Learning 01 Group Work

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```
library(tidyverse)
library(e1071)

house_data <- read_csv("./Machine-learning-databases/house_data.csv")

house_data$object_type_name <- as.factor(house_data$object_type_name)
house_data$num_rooms <- as.integer(house_data$num_rooms)

house_data <- house_data %>% select(object_type_name,
                                   build_year,
                                   living_area,
                                   zipcode,
                                   municipality_name,
                                   num_rooms,
                                   travel_time_private_transport,
                                   travel_time_public_transport,
                                   number_of_buildings_in_hectare,
                                   number_of_apartments_in_hectare,
                                   number_of_workplaces_in_hectare,
                                   population_in_hectare,
                                   water_percentage_1000,
                                   price)
```

#old

Description of the used data set

The data set contains the following predictors:

- object_type_name categorical
- build_year continues
- living_area continues
- zipcode categorical
- municipality_name categorical
- num_rooms count data/categorical
- travel_time_private_transport continues
- travel_time_public_transport continues
- number_of_buildings_in_hectare count data
- number_of_apartments_in_hectare count data
- number_of_workplaces_in_hectare count data
- population_in_hectare count data
- water_percentage_1000 count data
- price continues

Graphical interpretation and simple linear modeling

Regression Splines

Generalised Additive Models

Generalised linear models

Tree's

Support vector machines