


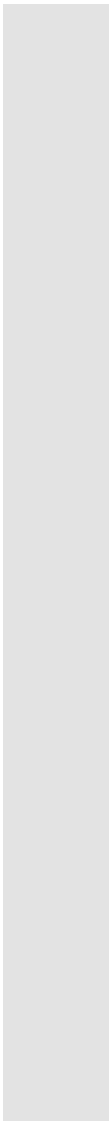
# Modele

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# Table of Contents

- 
1. Quick data description
  2. Random Forest models
  3. Xgboost models
  4. Lightgbm models
  5. Catboost models
- 



# 1. Quick data description

COLUMNS:

- Price
- Area
- Location
- No. Of Bedrooms
- 36 categorical variables





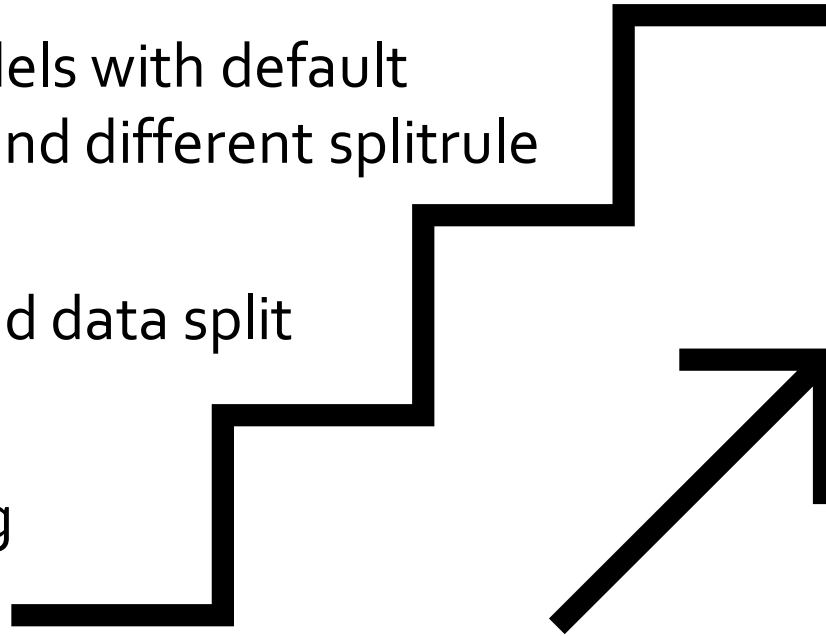
## 2. Random Forest models

Parameters tuning with iRF and mlr3  
libraries

3 simple models with default  
parameters and different splitrule

preprocessing() and data split

Function docs reading



# METRICS USED:

- RMSE - Root Mean Square Error
- MSE – Mean Square Error
- MAE – Mean Absolute Error

# TOP 5 MODELS

SEED	NUM.TRE E	MTRY	MAX.DEPT H	SPLITRUL E	RMSE	MSE	MAE
123	Def.	Def.	Def.	Def.	10548491	1.112707e+14	4482309
123	321	15	Def.	Def.	10590541	1.121596e+14	4588262
123	85	15	100	Def.	10625789	1.129074e+14	4585146
123	321	15	100	Def.	10663314	1.137063e+14	4627616
123	Def.	Def.	Def.	extratrees	10680223	1.140672e+14	4563912





## 3. XGBoost models



## METRICS USED:

RMSE - Root Mean Square Error

MAE – Mean Absolute Error

# TOP 5 MODELS

SEED	ETA	NROUNDS	MAX.DEPTH	MIN.CHILD. WEIGHT	RMSE TEST	RMSE TRAIN	MAE TEST	MAE TRAIN
101	0.07	100	7	Def.	9391780	9460934	4248611	3874707
101	0.1	79	7	Def.	9615621	9319090	4260425	3829237
101	0.1	100	7	2	9503901	9716940	4275710	3879759
101	0.05	91	7	Def.	9268299	9732675	4227089	3962150
101	0.06	115	7	Def.	9540686	9418837	4256814	3875439

# 4. LightGBM

F(y)	num_iterations	learning_rate	RSME(Test )	RMSE(Train )
line	5000	0.001	2731813	5917982
line	6000	0.001	2760426	5609261
line	2000	0.0007	3497299	7844099
line	def	def	3836937	7492619
log	5000	0.0001	4645974	12596833

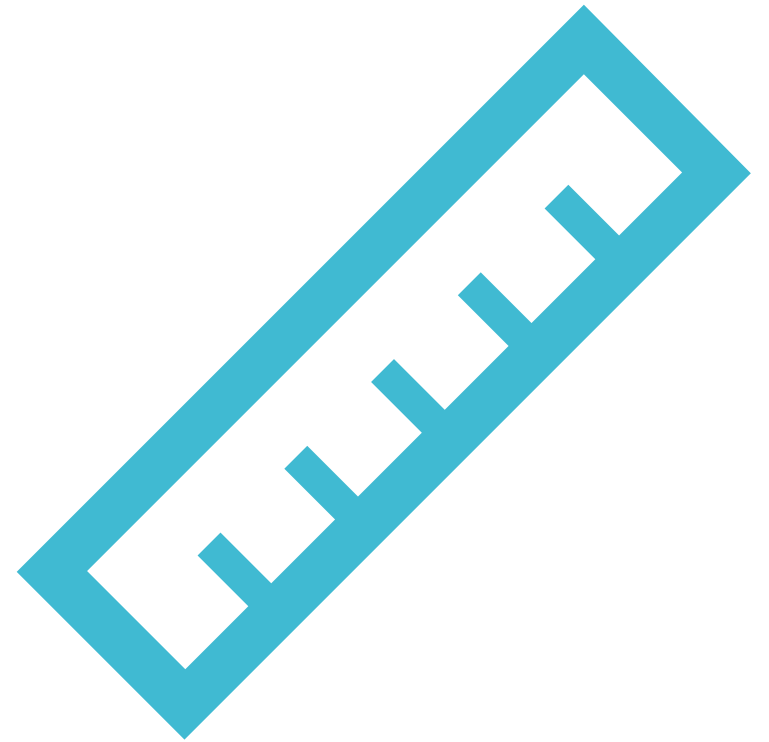


## 5. Catboost models

# METRICS USED:

RMSE - Root Mean Square Error

MAE – Mean Absolute Error



# TOP 5 MODELS

SEED	DEPTH	LEARNING_RATE	ITERATIONS	RMSE TEST	RMSE TRAIN	MAE TEST	MAE TRAIN
123	4	0.1	Def.	1741564	1042481	838151.6	479544.5
123	4	Def.	100	2210117	1799317	1253618	976955.9
123	8	Def.	80	1965214	2274545	1215391	1094252
123	8	0.1	Def.	1617599	822247.7	614959.3	163346.1
123	8	Def.	80	1651593	1148300	841683.4	556736

Dziękujemy  
za uwagę

