Target variable: roi_month

Predictor no. 1 - Dummy Regressor (it's prediction is always the mean of the train set)

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.01
2. Mean absolute percentage error: 246363940402.32
3. R^2: -0.00

Cross-validation (split into 10 folds, repeated 3 times):

1. Mean squared error: 0.06
2. Mean absolute percentage error: 279477149765.40
3. R^2: 0.00

Predictor no. 2 - Linear Regression

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.01
2. Mean absolute percentage error: 235917907372.29
3. R^2: 0.00

Cross-validation (split into 10 folds, repeated 3 times):

1. Mean squared error: 0.06
2. Mean absolute percentage error: 291491207293.52
3. R^2: 0.00

Predictor no. 3 - Gradient Boosting Regressor

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.01
2. Mean absolute percentage error: 949257279346.63
3. R^2: 0.29

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.05

2. Mean absolute percentage error: 619274041232.48
3. R^2: 0.30

Predictor no. 4 - Multilayer Perceptron

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.01
2. Mean absolute percentage error: 399303975801.05
3. R^2: -0.02

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.01
2. Mean absolute percentage error: 368011572565.68
3. R^2: 0.04

Predictor no. 5 - LSTM

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.01
2. Mean absolute percentage error: 460146030697.15
3. R^2: -0.03

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.01
2. Mean absolute percentage error: 705941500777.65
3. R^2: 0.19

Target variable: roi_quarter

Predictor no. 1 - Dummy Regressor (it's prediction is always the mean of the train set)

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.02
2. Mean absolute percentage error: 163322025532.92
3. R^2: -0.00

Cross-validation (split into 10 folds, repeated 3 times):

1. Mean squared error: 0.10
2. Mean absolute percentage error: 253215086857.09
3. R^2: 0.00

Predictor no. 2 - Linear Regression

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.02
2. Mean absolute percentage error: 166503753145.32
3. R^2: 0.00

Cross-validation (split into 10 folds, repeated 3 times):

1. Mean squared error: 0.10
2. Mean absolute percentage error: 202136145490.01
3. R^2: 0.01

Predictor no. 3 - Gradient Boosting Regressor

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.02
2. Mean absolute percentage error: 185524254781.56
3. R^2: 0.17

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.09

2. Mean absolute percentage error: 250739376984.75
3. R^2: 0.19

Predictor no. 4 - Multilayer Perceptron

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.02
2. Mean absolute percentage error: 604747014422.68
3. R^2: 0.14

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.02
2. Mean absolute percentage error: 308098796086.99
3. R^2: 0.17

Predictor no. 5 - LSTM

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.02
2. Mean absolute percentage error: 162156638512.70
3. R^2: -0.04

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.02
2. Mean absolute percentage error: 282388887074.43
3. R^2: 0.17

Target variable: roi_halfyear

Predictor no. 1 - Dummy Regressor (it's prediction is always the mean of the train set)

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.04
2. Mean absolute percentage error: 442720016741.64
3. R^2: -0.00

Cross-validation (split into 10 folds, repeated 3 times):

1. Mean squared error: 0.15
2. Mean absolute percentage error: 206899349483.69
3. R^2: 0.00

Predictor no. 2 - Linear Regression

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.04
2. Mean absolute percentage error: 384857302922.56
3. R^2: 0.02

Cross-validation (split into 10 folds, repeated 3 times):

1. Mean squared error: 0.15
2. Mean absolute percentage error: 180460677781.09
3. R^2: 0.01

Predictor no. 3 - Gradient Boosting Regressor

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.03
2. Mean absolute percentage error: 489843812497.49
3. R^2: 0.37

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.12

2. Mean absolute percentage error: 186034237810.27
3. R^2: 0.36

Predictor no. 4 - Multilayer Perceptron

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.03
2. Mean absolute percentage error: 586124585422.58
3. R^2: 0.31

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.03
2. Mean absolute percentage error: 211277354626.58
3. R^2: 0.30

Predictor no. 5 - LSTM

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.04
2. Mean absolute percentage error: 387474723716.67
3. R^2: -0.02

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.05
2. Mean absolute percentage error: 143931291247.74
3. R^2: 0.05

Target variable: roi_year

Predictor no. 1 - Dummy Regressor (it's prediction is always the mean of the train set)

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.10
2. Mean absolute percentage error: 328149759168.82
3. R^2: -0.00

Cross-validation (split into 10 folds, repeated 3 times):

1. Mean squared error: 0.22
2. Mean absolute percentage error: 440265117505.58
3. R^2: 0.00

Predictor no. 2 - Linear Regression

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.10
2. Mean absolute percentage error: 222705368565.50
3. R^2: 0.02

Cross-validation (split into 10 folds, repeated 3 times):

1. Mean squared error: 0.22
2. Mean absolute percentage error: 286588457232.89
3. R^2: 0.02

Predictor no. 3 - Gradient Boosting Regressor

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.06
2. Mean absolute percentage error: 263817740244.01
3. R^2: 0.41

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.18

2. Mean absolute percentage error: 333229490246.91
3. R^2: 0.42

Predictor no. 4 - Multilayer Perceptron

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.06
2. Mean absolute percentage error: 79760120208.38
3. R^2: 0.37

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.06
2. Mean absolute percentage error: 284356554522.30
3. R^2: 0.42

Predictor no. 5 - LSTM

Train-test split (0.67 - 0.33):

1. Mean squared error: 0.10
2. Mean absolute percentage error: 377366361889.83
3. R^2: -0.04

Cross-validation (split into 5 folds, repeated 1 time):

1. Mean squared error: 0.10
2. Mean absolute percentage error: 539952214709.77
3. R^2: 0.04