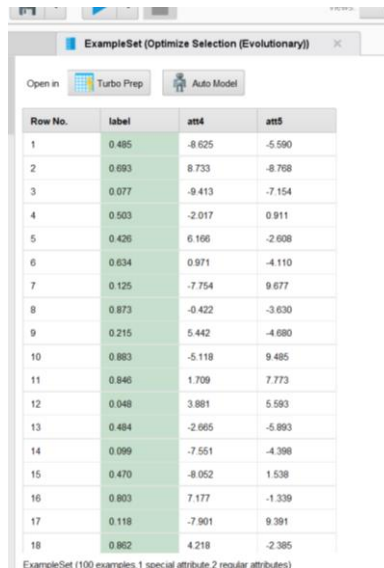


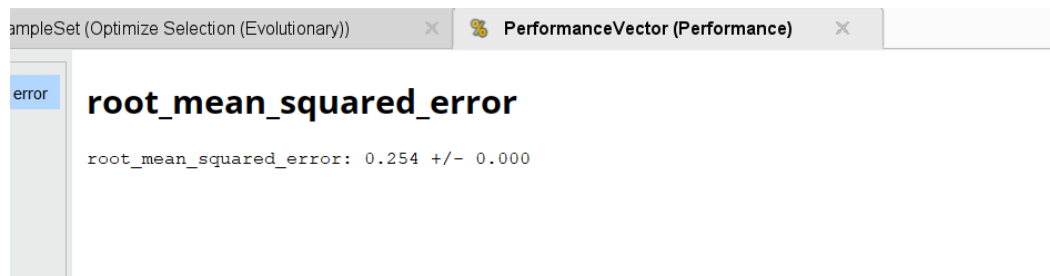
Lab 6

Joud Aljehani-2111644

SVM-Evolution optimaization



Row No.	label	att4	att5
1	0.485	-8.625	-5.590
2	0.693	8.733	-8.768
3	0.077	-9.413	-7.154
4	0.503	-2.017	0.911
5	0.426	6.166	-2.608
6	0.634	0.971	-4.110
7	0.125	-7.754	9.677
8	0.873	-0.422	-3.630
9	0.215	5.442	-4.680
10	0.883	-5.118	9.485
11	0.846	1.709	7.773
12	0.048	3.881	5.593
13	0.484	-2.665	-5.893
14	0.099	-7.551	-4.398
15	0.470	-8.052	1.538
16	0.803	7.177	-1.339
17	0.118	-7.901	9.391
18	0.862	4.218	-2.385

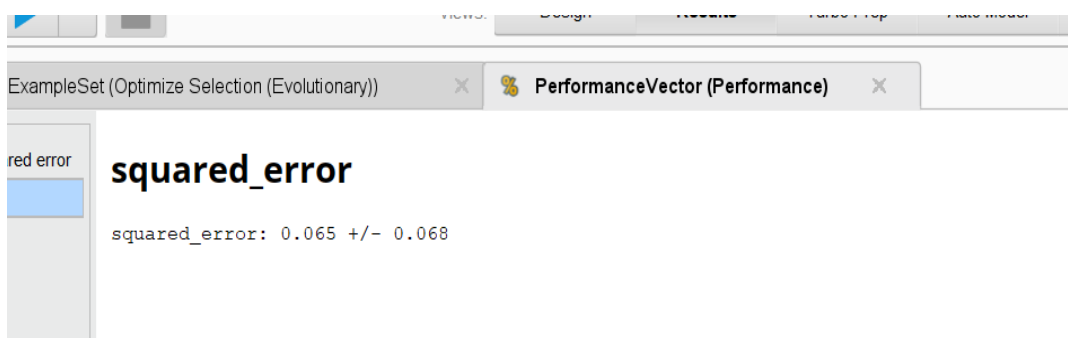


ExampleSet (Optimize Selection (Evolutionary)) PerformanceVector (Performance)

error

root_mean_squared_error

root_mean_squared_error: 0.254 +/- 0.000



ExampleSet (Optimize Selection (Evolutionary)) PerformanceVector (Performance)

red error

squared_error

squared_error: 0.065 +/- 0.068

NN -Evolution optimaization

new process* - RapidMiner Studio Educational 10.2.000 @ DESKTOP-U78LQP>

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model Interactive Analysis

Find data, operators, etc. All Studio

Result History

ExampleSet (Optimize Selection (Evolutionary)) PerformanceVector (Performance)

Filter (100 / 100 examples): all

Row No.	label	att2	att3	att4
1	0.485	7.267	1.292	-8.625
2	0.693	9.370	1.241	8.733
3	0.077	-1.978	-6.225	-9.413
4	0.503	-4.395	5.304	-2.017
5	0.426	8.017	0.328	6.166
6	0.634	-9.906	5.895	0.971
7	0.125	3.061	-4.080	-7.754
8	0.873	-5.100	-2.740	-0.422
9	0.215	-8.663	-0.568	5.442
10	0.883	-5.459	7.306	-5.118
11	0.846	7.311	3.584	1.709
12	0.048	8.314	2.705	3.881
13	0.484	-3.029	6.953	-2.665
14	0.099	-9.919	0.629	-7.551
15	0.470	3.679	0.544	-8.052
16	0.803	7.542	6.879	7.177
17	0.118	-6.923	3.247	-7.901
18	0.862	-8.055	9.119	4.218

ExampleSet (100 examples, 1 special attribute, 3 regular attributes)

Repository

Import Data

Samples

Local Repository (Local)

Connections

data

processes

lab555555 (11/11/23 8:42 AM - 7 KB)

lab5-1 (11/11/23 8:53 AM - 10 KB)

DB (Legacy)

9:25 am 01/11/2023

ExampleSet (Optimize Selection (Evolutionary)) PerformanceVector (Performance)

Criterion

root mean squared error

squared error

root_mean_squared_error

root_mean_squared_error: 0.241 +/- 0.000

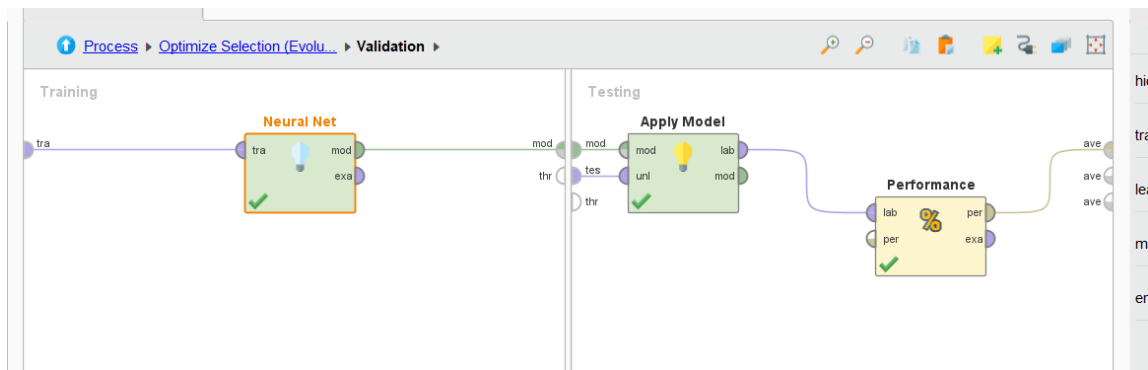
Criterion

root mean squared error

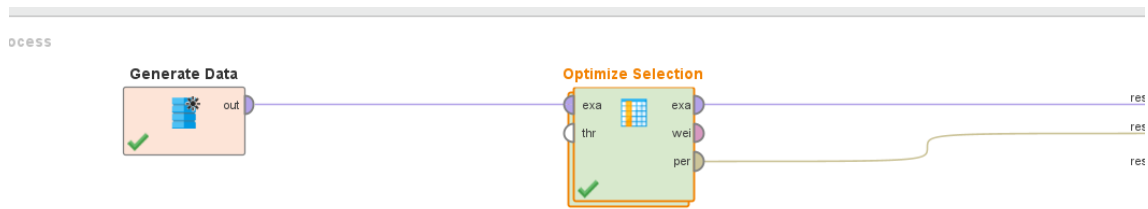
squared error

squared_error

squared_error: 0.058 +/- 0.066



NN -selection optimaization-forward



The screenshot shows the RapidMiner Studio interface. The 'Results' view is active, displaying a table of data. The table has three columns: 'Row No.', 'label', and 'att1'. The data is as follows:

Row No.	label	att1
1	0.485	2.468
2	0.693	-6.351
3	0.077	-5.190
4	0.503	-4.696
5	0.426	5.377
6	0.634	-2.585
7	0.125	5.533
8	0.873	3.662
9	0.215	1.923
10	0.883	-1.549
11	0.846	-0.258
12	0.048	7.980
13	0.484	-6.042
14	0.099	-5.790
15	0.470	0.731
16	0.803	-9.520
17	0.118	4.078
18	0.862	2.415

The interface also shows a 'Repository' panel on the right with 'Import Data' and 'Local Repository (Local)' options. The bottom status bar indicates the time is 9:56 am on 01/11/2023.

This block shows a close-up of the 'PerformanceVector (Performance)' and 'ExampleSet (Optimize Selection)' tabs. The 'PerformanceVector (Performance)' tab is active, displaying the following information:

root_mean_squared_error

root_mean_squared_error: 0.257 +/- 0.000

The 'ExampleSet (Optimize Selection)' tab is also visible, displaying the following information:

squared_error

squared_error: 0.066 +/- 0.065

NN -selection optimaization - backwoard

rmanceVector (Performance) X ExampleSet (Optimize Selection) X

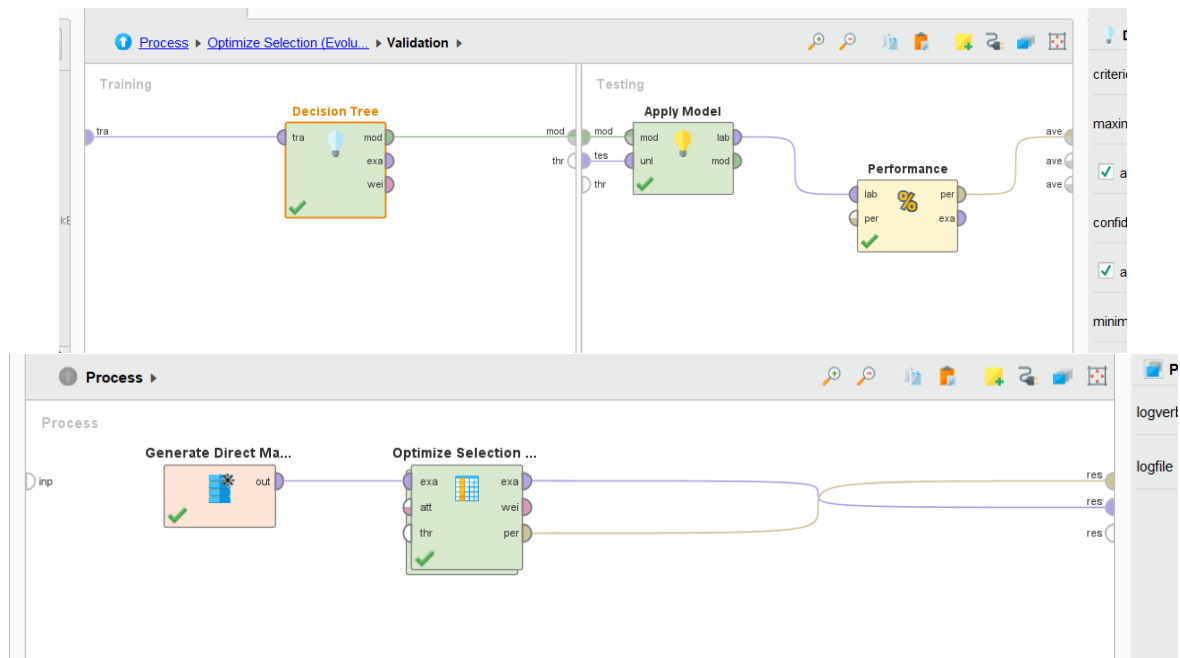
root_mean_squared_error

root_mean_squared_error: 0.275 +/- 0.000

squared_error

squared_error: 0.076 +/- 0.067

2- Decision Tree



ExampleSet (Optimize Selection (Evolutionary))

PerformanceVector (Performance)

Open in

Turbo Prep

Auto Model

Row No.	label	name	age	lifestyle	zip code	earnings
1	no response	VnSEFOuL	62	cozily	50168	102526
2	no response	8Tv0hcce	34	active	66479	33006
3	response	Zny9ysbk	69	healthy	16592	118760
4	response	HV3xCamM	57	cozily	50068	131429
5	response	sflRsQ6v	66	cozily	35988	96003
6	no response	w9voDHj0	21	healthy	60039	83376
7	no response	VUkT58V5	22	healthy	69662	49826
8	response	HzMvC0c1	59	cozily	40432	41166
9	response	B9MsYPOR	63	active	55994	134340
10	no response	mWUY9Cjs	31	active	37460	108695
11	response	Lavsf4Ms	60	cozily	36782	49723
12	response	kNAihUVY	38	healthy	12447	105801
13	no response	FHL6d3WH	36	active	56504	79703
14	no response	taO86r6P	30	cozily	84343	68693
15	no response	qQSz8WWJ	64	healthy	66428	111755
16	no response	waFEJp2V	37	cozily	18272	36430
17	response	CGEIJpBt	61	cozily	24254	129420
18	no response	xQPaw1nF	48	cozily	29470	78714

ExampleSet (100 examples, 1 special attribute, 5 regular attributes)

The best sutied one is the NN with Evolution optimaization with less error