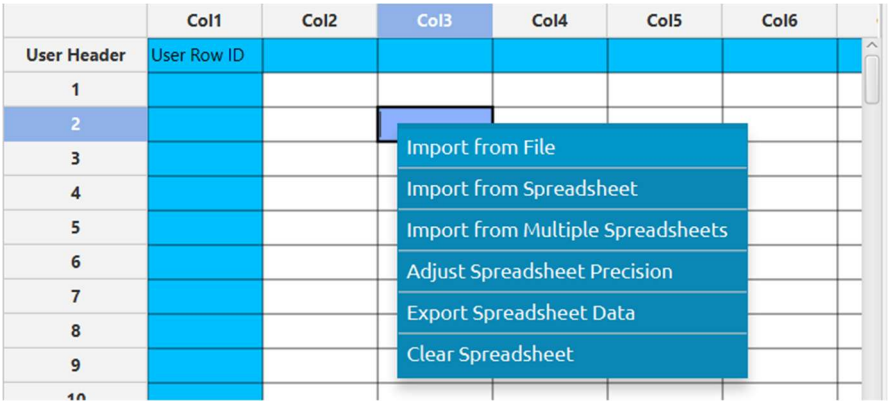
Salary Prediction Data

The goal of this study is to train a model in order to predict a person's salary. The dataset used in this case study, which can be found in https://www.kaggle.com/datasets/mrsimple07/salary-prediction-data/data, has 7 features and 1000 samples. It contains simulated data reflecting various factors influencing salary levels such as education, experience, location, job title, age, and gender.

Isalos version used: 2.0.6

Step 1: Import data from file

Right click on the input spreadsheet (left) and choose the option "Import from File". Then navigate through your files to load the one with the salary data.

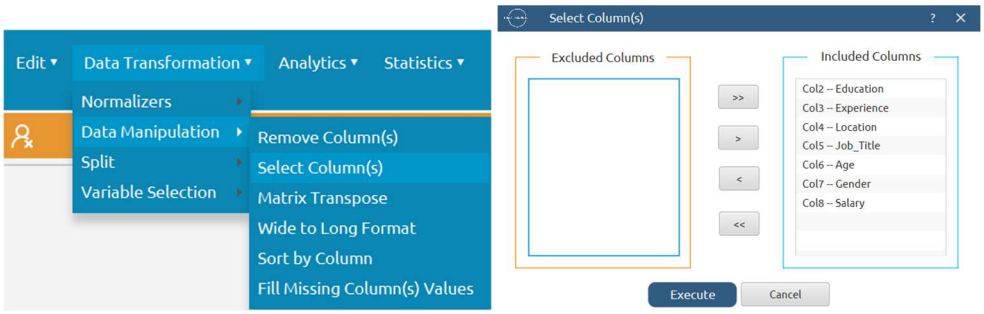


The data will appear on the left spreadsheet.

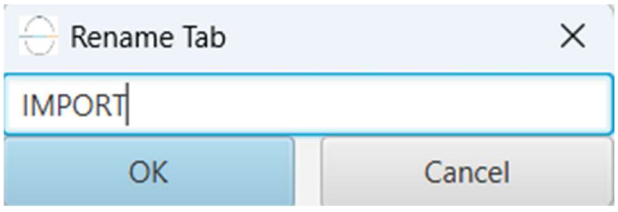
	Col1	Col2 (S)	Col3 (I)	Col4 (S)	Col5 (S)	Col6 (I)	Col7 (S)	Col8 (D)
User Header	User Row ID	Education	Experience	Location	Job_Title	Age	Gender	Salary
1		High School	8	Urban	Manager	63	Male	84620.05366451902
2		PhD	11	Suburban	Director	59	Male	142591.2558943053
3		Bachelor	28	Suburban	Manager	61	Female	97800.25540414132
4		High School	29	Rural	Director	45	Male	96834.67128150171
5		PhD	25	Urban	Analyst	26	Female	132157.78617465615
6		PhD	19	Rural	Director	27	Female	156312.9362084037
7		PhD	4	Rural	Director	60	Female	130567.64945544896
8		PhD	13	Suburban	Director	49	Female	148707.74075900653
9		Bachelor	20	Urban	Engineer	25	Female	95945.27542859329
10		PhD	14	Urban	Analyst	58	Female	133339.3896823029
11		Bachelor	23	Rural	Manager	23	Female	101164.09236529446
12		Master	1	Urban	Director	27	Female	124251.98714687066
13		High School	11	Urban	Manager	63	Male	55066.114352582896
14		PhD	4	Rural	Manager	43	Male	124972.50876977787
15		Master	7	Suburban	Director	44	Female	126139.13670110232

Step 2: Manipulate data

In this dataset there are not any empty values, so we can select all the columns to be used. On the menu click on *Data Transformation → Data Manipulation → Select Column(s)* and select all columns.



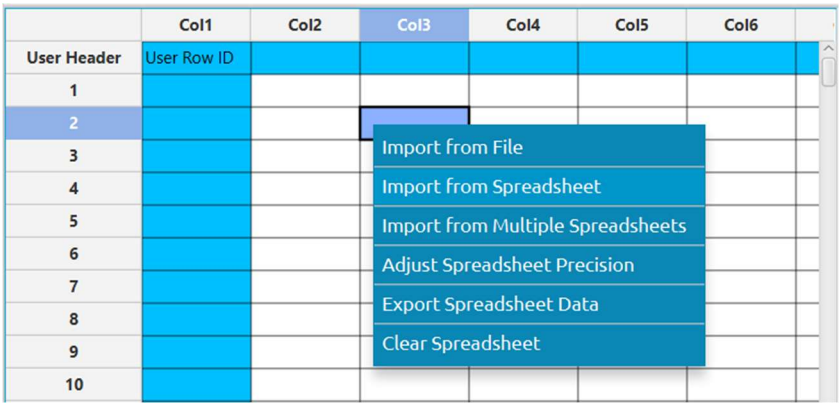
All of the data will appear in the output (right) spreadsheet. This tab can be renamed “IMPORT” by right-clicking on it and choosing the “Rename” option.



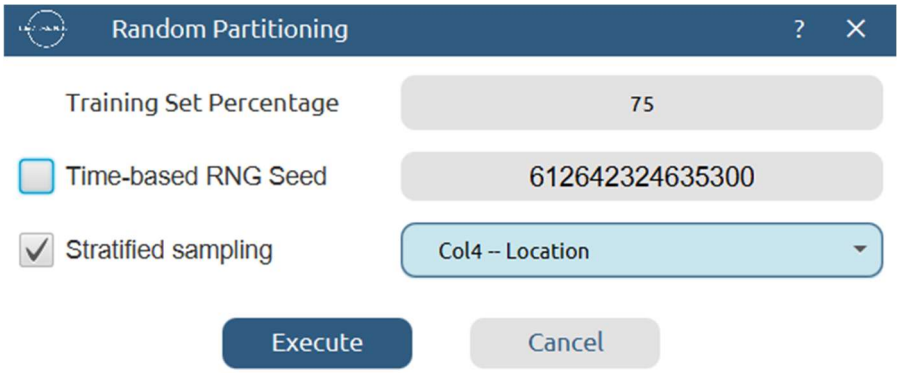
Step 3: Split data

Create a new tab by pressing the "+" button on the bottom of the page with the name "TRAIN_TEST_SPLIT" which we will use for splitting the train and test set.

Import data into the input spreadsheet of the "TRAIN_TEST_SPLIT" tab from the output of the "IMPORT" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".



Split the dataset by choosing *Data Transformation → Split → Random Partitioning*. Then choose the "Training set percentage" and the column for the sampling as shown below:



The results will be two separate spreadsheets, "TRAIN_TEST_SPLIT: Training Set" and "TRAIN_TEST_SPLIT: Test Set", which will be available to import into the next tabs.

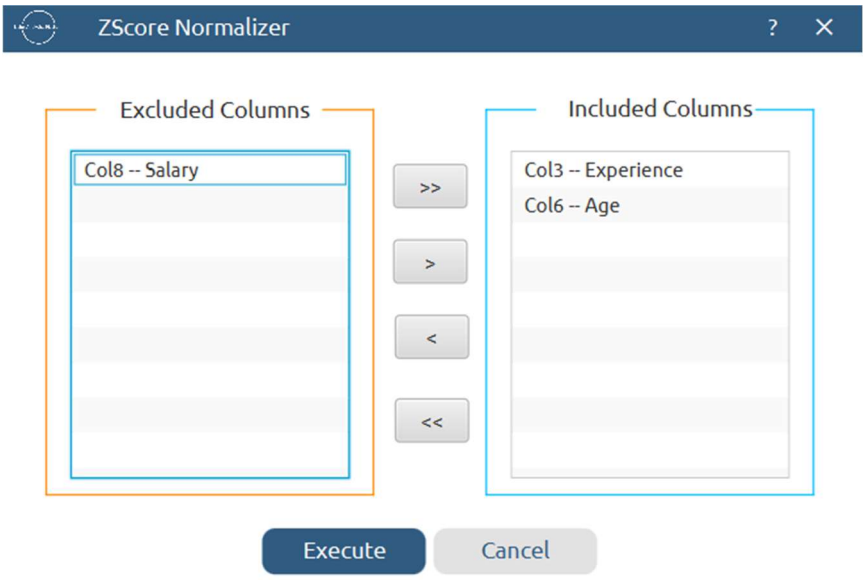
Step 4: Normalize the training set

Create a new tab by pressing the "+" button on the bottom of the page with the name "NORMALIZE_TRAIN_SET".

Import into the input spreadsheet of the "NORMALIZE_TRAIN_SET" tab the train set from the output of the "TRAIN_TEST_SPLIT" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet". From the available Select input tab options choose "TRAIN_TEST_SPLIT: Training Set".

	Col1	Col2 (S)	Col3 (I)	Col4 (S)	Col5 (S)	Col6 (I)	Col7 (S)	Col8 (D)
User Header	User Row ID	Education	Experience	Location	Job_Title	Age	Gender	Salary
1		High School	8	Urban	Manager	63	Male	84620.0536645
2		Bachelor	28	Suburban	Manager	61	Female	97800.2554041
3		PhD	25	Urban	Analyst	26	Female	132157.7861747
4		PhD	19	Rural	Director	27	Female	156312.9362084
5		PhD	13	Suburban	Director	49	Female	148707.7407590
6		Bachelor	20	Urban	Engineer	25	Female	95945.2754286
7		PhD	14	Urban	Analyst	58	Female	133339.3896823
8		Bachelor	23	Rural	Manager	23	Female	101164.0923653
9		Master	1	Urban	Director	27	Female	124251.9871469
10		High School	11	Urban	Manager	63	Male	55066.1143526
11		PhD	4	Rural	Manager	43	Male	124972.5087698
12		Master	7	Suburban	Director	44	Female	126139.1367011
13		High School	28	Suburban	Engineer	49	Male	81007.1994509
14		High School	4	Suburban	Analyst	37	Male	60693.9247139
15		High School	26	Rural	Director	63	Male	103386.0702899

Normalize the data using Z-score: *Data Transformation → Normalizers → Z Score* and select all columns except the "Salary" target column.



The results will appear on the output spreadsheet.

	Col1	Col2 (S)	Col3 (D)	Col4 (S)	Col5 (S)	Col6 (D)	Col7 (S)	Col8 (D)
User Header	User Row ID	Education	Experience	Location	Job_Title	Age	Gender	Salary
1		High School	-0.8086592	Urban	Manager	1.5315208	Male	84620.0536645
2		Bachelor	1.5762971	Suburban	Manager	1.3828968	Female	97800.2554041
3		PhD	1.2185537	Urban	Analyst	-1.2180233	Female	132157.7861747
4		PhD	0.5030668	Rural	Director	-1.1437113	Female	156312.9362084
5		PhD	-0.2124201	Suburban	Director	0.4911528	Female	148707.7407590
6		Bachelor	0.6223146	Urban	Engineer	-1.2923353	Female	95945.2754286
7		PhD	-0.0931723	Urban	Analyst	1.1599608	Female	133339.3896823
8		Bachelor	0.9800580	Rural	Manager	-1.4409593	Female	101164.0923653
9		Master	-1.6433939	Urban	Director	-1.1437113	Female	124251.9871469
10		High School	-0.4509157	Urban	Manager	1.5315208	Male	55066.1143526
11		PhD	-1.2856505	Rural	Manager	0.0452808	Male	124972.5087698
12		Master	-0.9279070	Suburban	Director	0.1195928	Female	126139.1367011
13		High School	1.5762971	Suburban	Engineer	0.4911528	Male	81007.1994509
14		High School	-1.2856505	Suburban	Analyst	-0.4005912	Male	60693.9247139
15		High School	1.3378015	Rural	Director	1.5315208	Male	103386.0702899

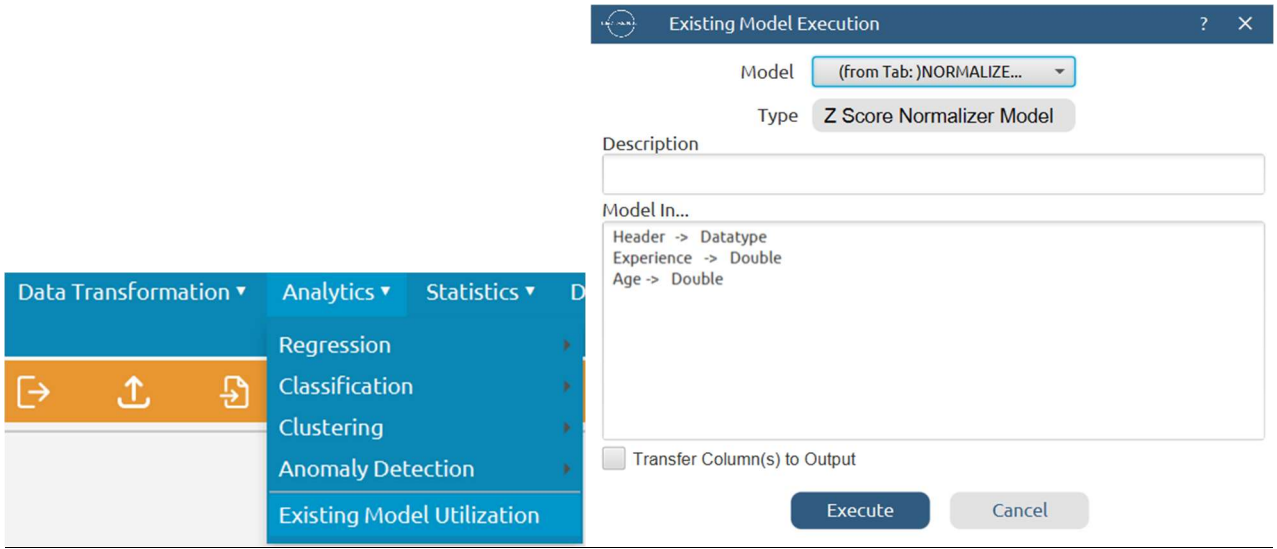
Step 5: Normalize the test set

Create a new tab by pressing the “+” button on the bottom of the page with the name “NORMALIZE_TEST_SET”.

Import into the input spreadsheet of the “NORMALIZE_TEST_SET” tab the test set from the output of the “TRAIN_TEST_SPLIT” tab by right-clicking on the input spreadsheet and then choosing “Import from Spreadsheet”. From the available Select input tab options choose “TRAIN_TEST_SPLIT: Test Set”.

	Col1	Col2 (S)	Col3 (I)	Col4 (S)	Col5 (S)	Col6 (I)	Col7 (S)	Col8 (D)
User Header	User Row ID	Education	Experience	Location	Job_Title	Age	Gender	Salary
1		PhD	11	Suburban	Director	59	Male	142591.2558943
2		High School	29	Rural	Director	45	Male	96834.6712815
3		PhD	4	Rural	Director	60	Female	130567.6494554
4		High School	21	Urban	Manager	62	Female	89426.9471172
5		Bachelor	12	Urban	Manager	20	Male	104762.3985202
6		High School	14	Urban	Analyst	61	Female	75559.2441137
7		PhD	24	Suburban	Director	23	Female	153930.9338516
8		PhD	13	Rural	Director	50	Male	151123.3358934
9		Master	7	Rural	Director	40	Male	106019.0203964
10		PhD	2	Suburban	Director	31	Female	142122.6672683
11		High School	19	Urban	Manager	62	Male	95726.3671857
12		Bachelor	3	Suburban	Analyst	61	Female	66216.7016213
13		PhD	13	Suburban	Engineer	35	Female	127167.1160430
14		PhD	2	Rural	Analyst	20	Female	96967.3424310
15		High School	22	Suburban	Manager	60	Female	81946.5927810

Normalize the test set using the existing normalizer of the training set: *Analytics → Existing Model Utilization → Model (from Tab:) NORMALIZE_TRAIN_SET*



The results will appear on the output spreadsheet.

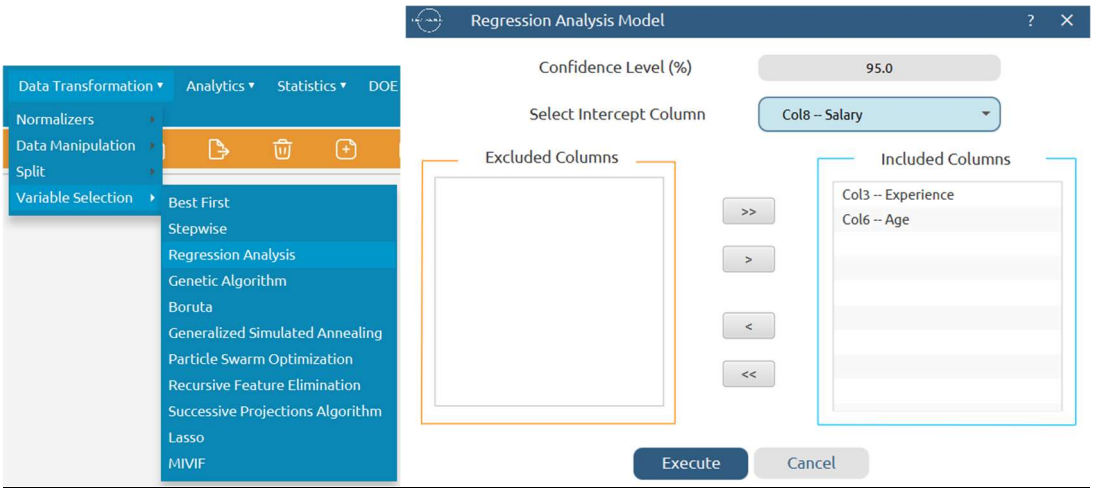
	Col1	Col2 (S)	Col3 (D)	Col4 (S)	Col5 (S)	Col6 (D)	Col7 (S)	Col8 (D)
User Header	User Row ID	Education	Experience	Location	Job_Title	Age	Gender	Salary
1		PhD	-0.4509157	Suburban	Director	1.2342728	Male	142591.2558943
2		High School	1.6955449	Rural	Director	0.1939048	Male	96834.6712815
3		PhD	-1.2856505	Rural	Director	1.3085848	Female	130567.6494554
4		High School	0.7415624	Urban	Manager	1.4572088	Female	89426.9471172
5		Bachelor	-0.3316679	Urban	Manager	-1.6638953	Male	104762.3985202
6		High School	-0.0931723	Urban	Analyst	1.3828968	Female	75559.2441137
7		PhD	1.0993059	Suburban	Director	-1.4409593	Female	153930.9338516
8		PhD	-0.2124201	Rural	Director	0.5654648	Male	151123.3358934
9		Master	-0.9279070	Rural	Director	-0.1776552	Male	106019.0203964
10		PhD	-1.5241461	Suburban	Director	-0.8464633	Female	142122.6672683
11		High School	0.5030668	Urban	Manager	1.4572088	Male	95726.3671857
12		Bachelor	-1.4048983	Suburban	Analyst	1.3828968	Female	66216.7016213
13		PhD	-0.2124201	Suburban	Engineer	-0.5492152	Female	127167.1160430
14		PhD	-1.5241461	Rural	Analyst	-1.6638953	Female	96967.3424310
15		High School	0.8608102	Suburban	Manager	1.3085848	Female	81946.5927810

Step 6: Feature selection

Create a new tab by pressing the "+" button on the bottom of the page with the name "FEATURE_SELECTION_REGRESSION".

Import data into the input spreadsheet of the "FEATURE_SELECTION_REGRESSION" tab from the output of the "NORMALIZE_TRAIN_SET" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Then do regression analysis with the "Salary" column as the intercept: *Data Transformation → Variable Selection → Regression Analysis*



The results will appear on the right spreadsheet.

	Col1	Col2 (S)	Col3 (S)	Col4 (S)	Col5 (S)	Col6 (S)	Col7 (S)
User Header	User Row ID						
1		Regression Statistics					
2		Multiple R	0.3277734				
3		R Square	0.1074354				
4		Adjusted R Square	0.1050457				
5		Standard Error	25828.9286778				
6		Observations	750				
7							
8			Degrees of Freedom	Sum of Squares	Mean Square	F-statistic	Significance F
9		Regression	2	59984792078.425224	29992396039.212612	44.9571090	0E-7
10		Residual	747	498348766812.28296	667133556.6429491		
11		Total	749	558333558890.7081			

	Coefficients	Standard Error	t-statistic	P-value	Lower 95.0%	Upper 95.0%
Salary	104708.9850140	943.1391249	111.0217806	0.0	102857.4663646	106560.5036635
Experience	8805.9549818	944.0169694	9.3281745	0E-7	6952.7129966	10659.1969671
Age	-1809.0292698	944.0169694	-1.9163101	0.0557070	-3662.2712551	44.2127154

The significant features according to the p-value are the following:

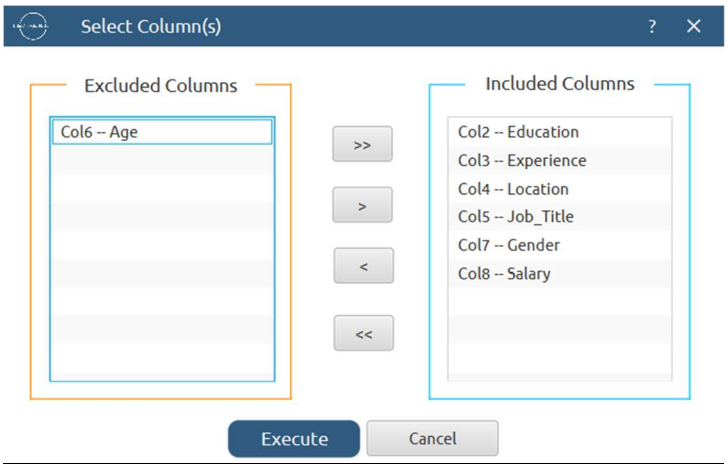
- Experience (p-value = 0E-7)

Step 7: Feature selection: Train set

Create a new tab by pressing the "+" button on the bottom of the page with the name "FEATURE_SELECTION_TRAIN_SET".

Import data into the input spreadsheet of the "FEATURE_SELECTION_TRAIN_SET" tab from the output of the "NORMALIZE_TRAIN_SET" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Manipulate the data by choosing the columns that correspond to the significant features (as indicated by the previous step) by browsing: *Data Transformation → Data Manipulation → Select Column(s)*



The results will appear on the output spreadsheet.

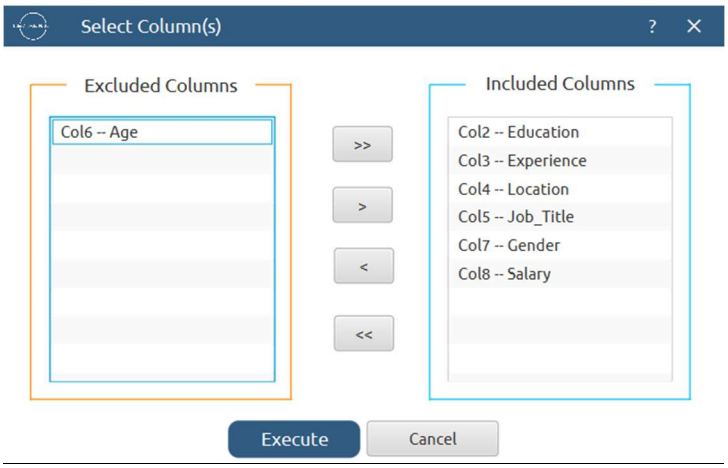
	Col1	Col2 (S)	Col3 (D)	Col4 (S)	Col5 (S)	Col6 (S)	Col7 (D)
User Header	User Row ID	Education	Experience	Location	Job_Title	Gender	Salary
1		High School	-0.8086592	Urban	Manager	Male	84620.0536645
2		Bachelor	1.5762971	Suburban	Manager	Female	97800.2554041
3		PhD	1.2185537	Urban	Analyst	Female	132157.7861747
4		PhD	0.5030668	Rural	Director	Female	156312.9362084
5		PhD	-0.2124201	Suburban	Director	Female	148707.7407590
6		Bachelor	0.6223146	Urban	Engineer	Female	95945.2754286
7		PhD	-0.0931723	Urban	Analyst	Female	133339.3896823
8		Bachelor	0.9800580	Rural	Manager	Female	101164.0923653
9		Master	-1.6433939	Urban	Director	Female	124251.9871469
10		High School	-0.4509157	Urban	Manager	Male	55066.1143526
11		PhD	-1.2856505	Rural	Manager	Male	124972.5087698
12		Master	-0.9279070	Suburban	Director	Female	126139.1367011
13		High School	1.5762971	Suburban	Engineer	Male	81007.1994509
14		High School	-1.2856505	Suburban	Analyst	Male	60693.9247139
15		High School	1.3378015	Rural	Director	Male	103386.0702899

Step 8: Feature selection: Test set

Create a new tab by pressing the "+" button on the bottom of the page with the name "FEATURE_SELECTION_TEST_SET".

Import data into the input spreadsheet of the "FEATURE_SELECTION_TEST_SET" tab from the output of the "NORMALIZE_TEST_SET" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Manipulate the data by choosing the columns that correspond to the significant features by browsing: *Data Transformation → Data Manipulation → Select Column(s)*



The results will appear on the output spreadsheet.

	Col1	Col2 (S)	Col3 (D)	Col4 (S)	Col5 (S)	Col6 (S)	Col7 (D)
User Header	User Row ID	Education	Experience	Location	Job_Title	Gender	Salary
1		PhD	-0.4509157	Suburban	Director	Male	142591.2558943
2		High School	1.6955449	Rural	Director	Male	96834.6712815
3		PhD	-1.2856505	Rural	Director	Female	130567.6494554
4		High School	0.7415624	Urban	Manager	Female	89426.9471172
5		Bachelor	-0.3316679	Urban	Manager	Male	104762.3985202
6		High School	-0.0931723	Urban	Analyst	Female	75559.2441137
7		PhD	1.0993059	Suburban	Director	Female	153930.9338516
8		PhD	-0.2124201	Rural	Director	Male	151123.3358934
9		Master	-0.9279070	Rural	Director	Male	106019.0203964
10		PhD	-1.5241461	Suburban	Director	Female	142122.6672683
11		High School	0.5030668	Urban	Manager	Male	95726.3671857
12		Bachelor	-1.4048983	Suburban	Analyst	Female	66216.7016213
13		PhD	-0.2124201	Suburban	Engineer	Female	127167.1160430
14		PhD	-1.5241461	Rural	Analyst	Female	96967.3424310
15		High School	0.8608102	Suburban	Manager	Female	81946.5927810

Step 9: Train the model

Create a new tab by pressing the "+" button on the bottom of the page with the name "TRAIN_MODEL(.fit)".

Import data into the input spreadsheet of the "TRAIN_MODEL(.fit)" tab from the output of the "FEATURE_SELECTION_TRAIN_SET" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Use the k-Nearest Neighbors (kNN) method to train and fit the model: *Analytics → Regression → k-Nearest Neighbors (kNN)*

The predictions will appear on the output spreadsheet.

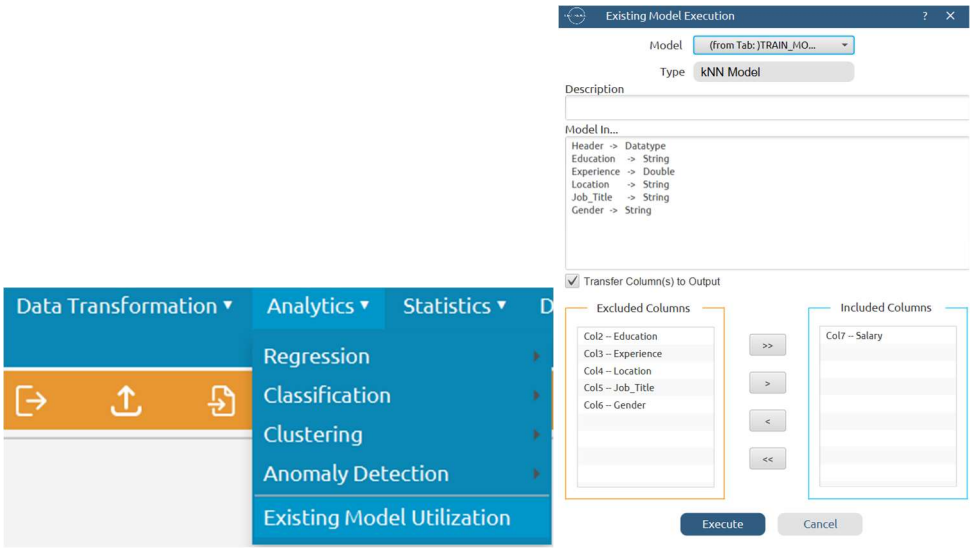
	Col1	Col2 (D)	Col3 (D)	Col4 (S)	Col5 (D)	Col6 (S)	Col7 (D)	Col8 (S)	Col9 (D)
User Header	User Row ID	Salary	kNN Prediction	Closest NN1	Distance from NN1	Closest NN2	Distance from NN2	Closest NN3	Distance from NN3
1		84620.0536645	84371.2535634	Entry 1	0.0	Entry 10	0.1071429	Entry 425	0.1785714
2		97800.2554041	97825.4100191	Entry 2	0.0	Entry 611	0.1071429	Entry 22	0.1785714
3		132157.7861747	131644.1121930	Entry 687	0.0	Entry 3	0.0	Entry 347	0.1071429
4		156312.9362084	156035.7620950	Entry 4	0.0	Entry 422	0.0714286	Entry 115	0.1071429
5		148707.7407590	148084.2546813	Entry 318	0.0	Entry 5	0.0	Entry 433	0.0357143
6		95945.2754286	95920.5032765	Entry 6	0.0	Entry 30	0.1071429	Entry 25	0.3571429
7		133339.3896823	132715.6446524	Entry 7	0.0	Entry 461	0.0357143	Entry 110	0.2142857
8		101164.0923653	101489.9707295	Entry 8	0.0	Entry 701	0.0357143	Entry 598	0.2142857
9		124251.9871469	122845.6807282	Entry 712	0.0	Entry 9	0.0	Entry 608	0.0714286
10		55066.1143526	55782.4964865	Entry 10	0.0	Entry 425	0.0714286	Entry 1	0.1071429
11		124972.5087698	125159.9136812	Entry 11	0.0	Entry 200	0.0714286	Entry 139	0.1071429
12		126139.1367011	131576.6872240	Entry 525	0.0	Entry 12	0.0	Entry 548	0.1428571
13		81007.1994509	80911.546373	Entry 13	0.0	Entry 168	0.0357143	Entry 263	0.2142857
14		60693.9247139	60319.1446275	Entry 532	0.0	Entry 14	0.0	Entry 431	0.1071429
15		103386.0702899	103619.4086562	Entry 15	0.0	Entry 711	0.0357143	Entry 564	0.0714286

Step 10: Validate the model

Create a new tab by pressing the "+" button on the bottom of the page with the name "VALIDATE_MODEL(.predict)".

Import data into the input spreadsheet of the "VALIDATE_MODEL(.predict)" tab from the output of the "FEATURE_SELECTION_TEST_SET" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

To validate the model: *Analytics → Existing Model Utilization→ Model (from Tab:) TRAIN_MODEL(.fit)*. Choose the column "Salary" to be transferred to the output spreadsheet.



The predictions will appear on the output spreadsheet.

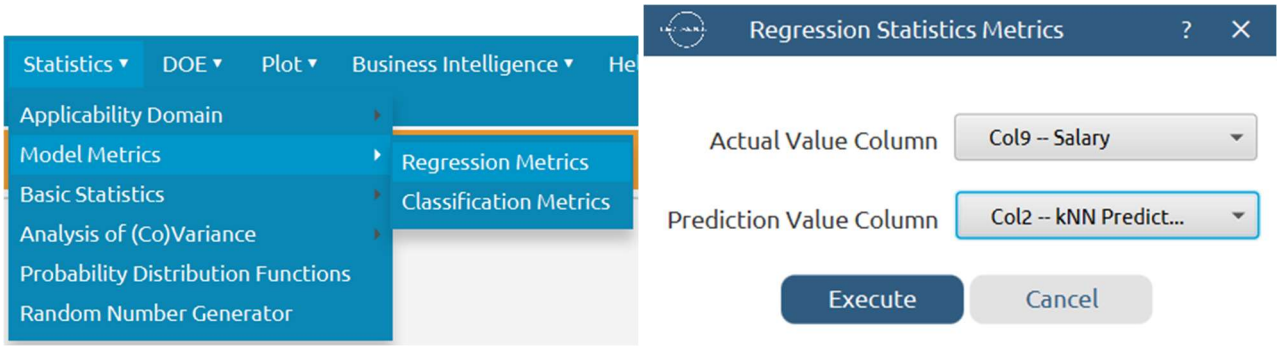
	Col1	Col2 (D)	Col3 (S)	Col4 (D)	Col5 (S)	Col6 (D)	Col7 (S)	Col8 (D)	Col9 (D)
User Header	User Row ID	kNN Prediction	Closest NN1	Distance from NN1	Closest NN2	Distance from NN2	Closest NN3	Distance from NN3	Salary
1		138207.5037867	Entry 476	0.1071429	Entry 505	0.1428571	Entry 595	0.2857143	142591.2558943
2		106321.2883547	Entry 15	0.1071429	Entry 711	0.1428571	Entry 564	0.1785714	96834.6712815
3		136565.0805565	Entry 272	0.0	Entry 247	0.0357143	Entry 310	0.1071429	130567.6494554
4		89992.5428607	Entry 390	0.1071429	Entry 55	0.1428571	Entry 592	0.2500000	89426.9471172
5		100573.6135774	Entry 378	0.0357143	Entry 605	0.1071429	Entry 367	0.1428571	104762.3985202
6		68822.3451643	Entry 319	0.0	Entry 342	0.0357143	Entry 180	0.0714286	75559.2441137
7		144218.3293937	Entry 734	0.0357143	Entry 565	0.1428571	Entry 190	0.2857143	153930.9338516
8		140516.1028102	Entry 29	0.1071429	Entry 380	0.1785714	Entry 84	0.1785714	151123.3358934
9		129735.1348079	Entry 183	0.1785714	Entry 709	0.3928571	Entry 674	0.6071429	106019.0203964
10		139356.9714041	Entry 107	0.1071429	Entry 706	0.1428571	Entry 642	0.1428571	142122.6672683
11		92413.8616406	Entry 214	0.0357143	Entry 208	0.0714286	Entry 370	0.1071429	95726.3671857
12		74152.8214856	Entry 178	0.1071429	Entry 321	0.25	Entry 103	0.4642857	66216.7016213
13		136752.9753723	Entry 526	0.0714286	Entry 51	0.1071429	Entry 629	0.1428571	127167.1160430
14		117357.5305002	Entry 671	0.1428571	Entry 37	0.1785714	Entry 655	0.3928571	96967.3424310
15		99882.8373202	Entry 221	0.0357143	Entry 140	0.1071429	Entry 685	0.1785714	81946.5927810

Step 11: Statistics calculation

Create a new tab by pressing the "+" button on the bottom of the page with the name "STATISTICS_ACCURACIES".

Import data into the input spreadsheet of the "STATISTICS_ACCURACIES" tab from the output of the "VALIDATE_MODEL(.predict)" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Calculate the statistical metrics for the regression: *Statistics → Model Metrics → Regression Metrics*



The results will appear on the output spreadsheet.

	Col1	Col2 (D)	Col3 (D)	Col4 (D)	Col5 (D)
User Header	User Row ID	Mean Squared Error	Root Mean Squared Error	Mean Absolute Error	R Squared
1		156376043.2385265	12505.0407132	9983.7997222	0.8354550

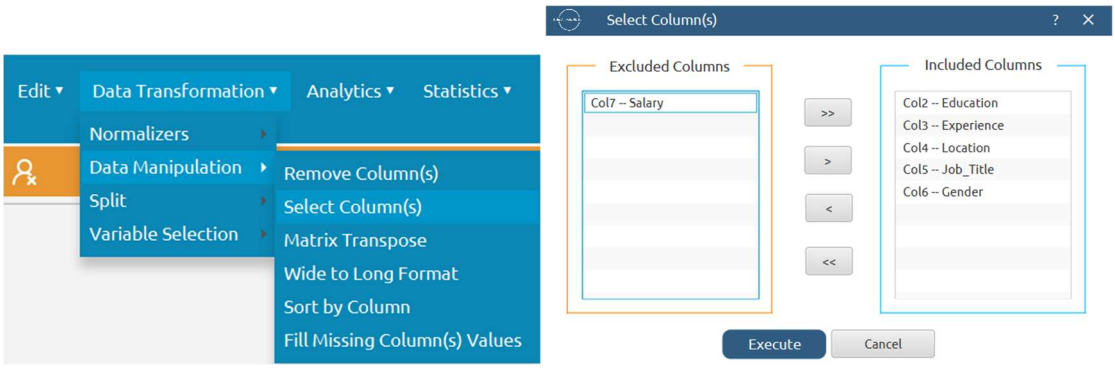
Step 12: Reliability check for each record of the test set

Step 12.a: Create the domain

Create a new tab by pressing the "+" button on the bottom of the page with the name "EXCLUDE_SALARY".

Import data into the input spreadsheet of the "EXCLUDE_SALARY" tab from the output of the "FEATURE_SELECTION_TRAIN_SET" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Manipulate the data to exclude the target column "Salary": *Data Transformation → Data Manipulation → Select Column(s)*

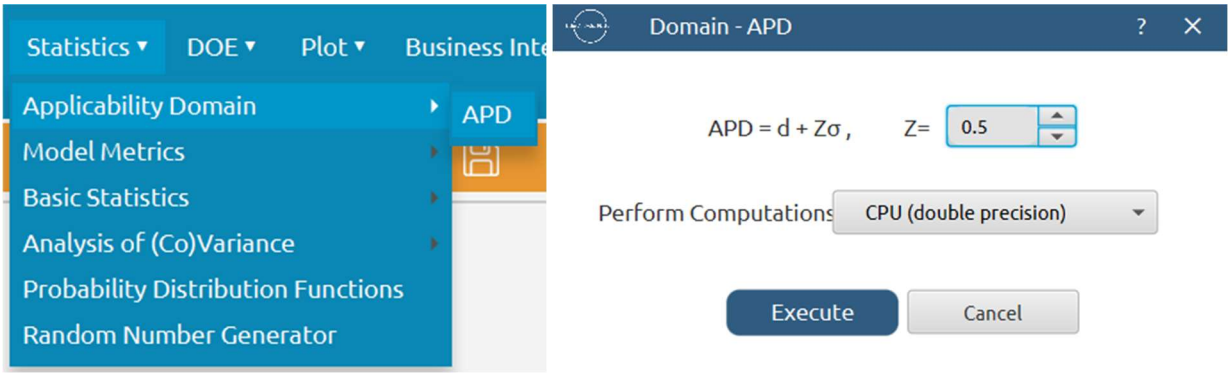


The results will appear on the output spreadsheet.

Create a new tab by pressing the "+" button on the bottom of the page with the name "DOMAIN".

Import data into the input spreadsheet of the "DOMAIN" tab from the output of the "EXCLUDE_SALARY" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Create the domain: *Statistics → Applicability Domain → APD*



The results will appear on the output spreadsheet.

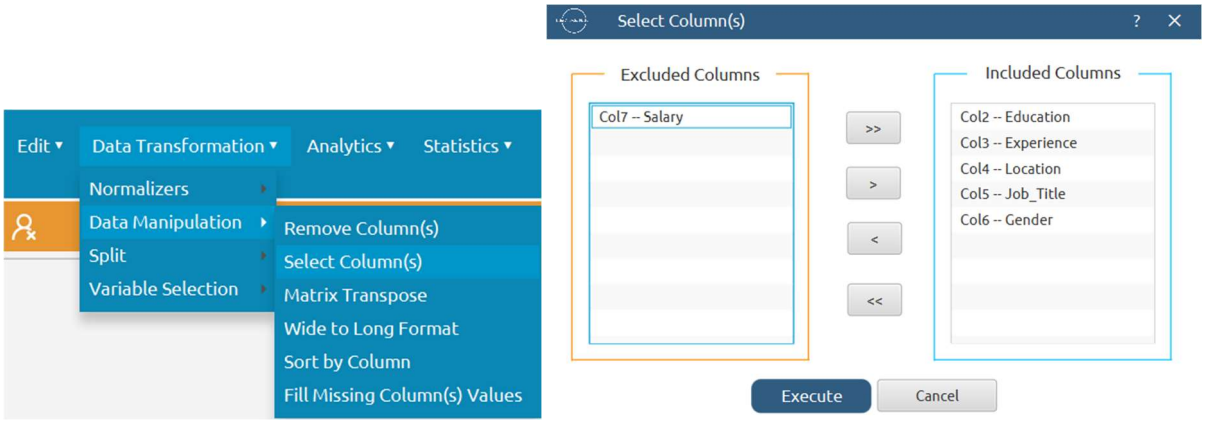
	Col1	Col2 (D)	Col3 (D)	Col4 (S)
User Header	User Row ID	Domain	APD	Prediction
1		0.0	0.6878307	reliable
2		0.0	0.6878307	reliable
3		0.0	0.6878307	reliable
4		0.0	0.6878307	reliable
5		0.0	0.6878307	reliable
6		0.0	0.6878307	reliable
7		0.0	0.6878307	reliable
8		0.0	0.6878307	reliable
9		0.0	0.6878307	reliable
10		0.0	0.6878307	reliable
11		0.0	0.6878307	reliable
12		0.0	0.6878307	reliable
13		0.0	0.6878307	reliable
14		0.0	0.6878307	reliable
15		0.0	0.6878307	reliable

Step 12.b: Check the test set reliability

Create a new tab by pressing the "+" button on the bottom of the page with the name "EXCLUDE_SALARY_TEST_SET".

Import data into the input spreadsheet of the "EXCLUDE_SALARY_TEST_SET" tab from the output of the "FEATURE_SELECTION_TEST_SET" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Manipulate the data to exclude the target column "Salary": *Data Transformation → Data Manipulation → Select Column(s)*

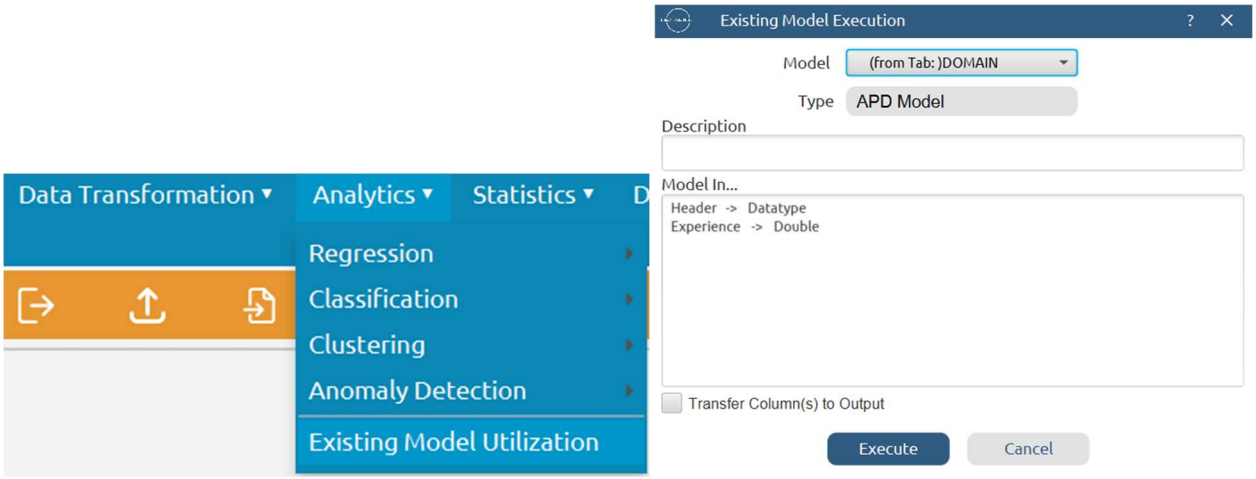


The results will appear on the output spreadsheet.

Create a new tab by pressing the "+" button on the bottom of the page with the name "RELIABILITY".

Import data into the input spreadsheet of the "RELIABILITY" tab from the output of the "EXCLUDE_SALARY_TEST_SET" tab by right-clicking on the input spreadsheet and then choosing "Import from Spreadsheet".

Check the Reliability: *Analytics → Existing Model Utilization → Model (from Tab:) DOMAIN*



The results will appear on the output spreadsheet. There are no unreliable samples in the test set.

	Col1	Col2 (D)	Col3 (D)	Col4 (S)
User Header	User Row ID	Domain	APD	Prediction
1		0.0	0.6878307	reliable
2		0.0	0.6878307	reliable
3		0.0	0.6878307	reliable
4		0.0	0.6878307	reliable
5		0.0	0.6878307	reliable
6		0.0	0.6878307	reliable
7		0.0	0.6878307	reliable
8		0.0	0.6878307	reliable
9		0.0	0.6878307	reliable
10		0.0	0.6878307	reliable
11		0.0	0.6878307	reliable
12		0.0	0.6878307	reliable
13		0.0	0.6878307	reliable
14		0.0	0.6878307	reliable
15		0.0	0.6878307	reliable

Final Isalos Workflow

Following the above-described steps, the final workflow on Isalos will look like this: