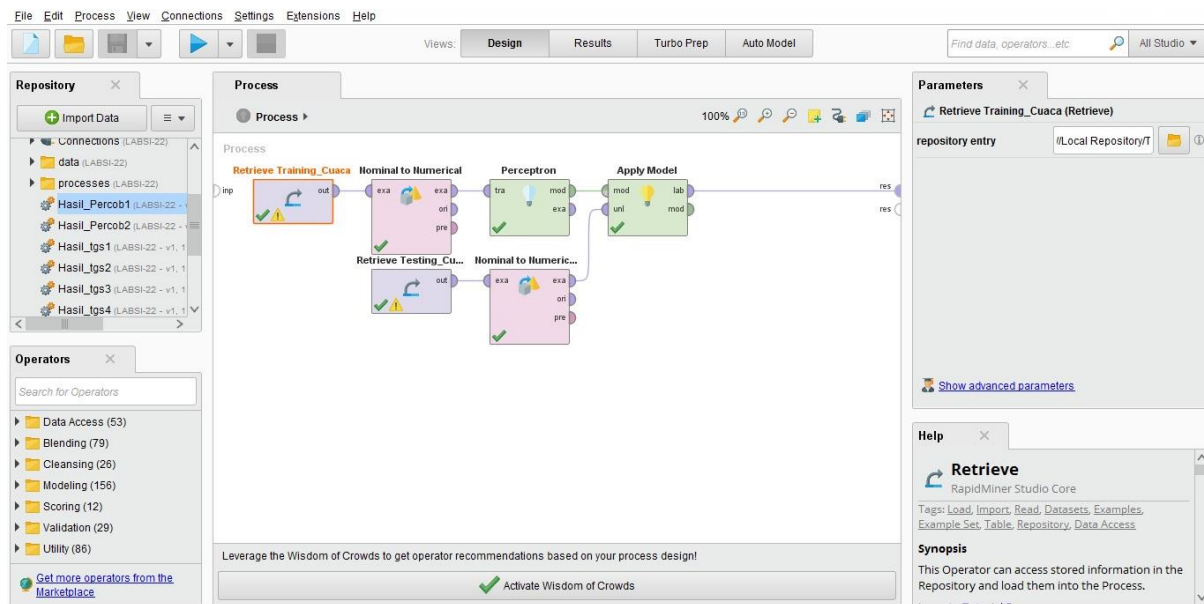


Nama : Riris Agriela Savitri  
NIM : L200170026  
Kelas : B

## MODUL 13

### 1. Prediksi Nilai Kelas Atribut dengan Neuron Perceptron



The screenshot displays the 'Results' view of the RapidMiner Studio workflow. The 'ExampleSet (Apply Model)' operator is selected, showing a table of 7 examples. The table includes the following columns: Row No., prediction(B..., confidence(...), confidence(...), Cuaca = Cer..., Cuaca = Me..., Cuaca = Huj..., Berangin = T..., Berangin = YA, and Suhu.

Row No.	prediction(B...	confidence(...	confidence(...	Cuaca = Cer...	Cuaca = Me...	Cuaca = Huj...	Berangin = T...	Berangin = YA	Suhu
1	TIDAK	1.000	0.000	1	0	0	1	0	75
2	TIDAK	1.000	0.000	1	0	0	0	1	80
3	TIDAK	1.000	0.000	1	0	0	0	1	83
4	TIDAK	1	0	0	1	0	1	0	70
5	TIDAK	1.000	0.000	0	1	0	1	0	68
6	TIDAK	1.000	0.000	0	0	1	0	1	65
7	TIDAK	1	0	0	0	1	0	1	64

The interface also includes a Repository panel on the right showing a tree view of data sources, and a Result History panel on the left showing the workflow steps.

Views: Design Results Turbo Prep Auto Model

Find data, operators...etc All Studio

Result History ExampleSet (Apply Model)

Open in Turbo Prep Auto Model

Filter (7 / 7 examples): all

ion(B...	confidence(...	confidence(...	Cuaca = Cer...	Cuaca = Me...	Cuaca = Huj...	Berangin = T...	Berangin = YA	Suhu	Kelembapan...
1.000	0.000	1	0	0	0	1	0	75	65
1.000	0.000	1	0	0	0	0	1	80	68
1.000	0.000	1	0	0	0	0	1	83	87
1	0	0	1	0	0	1	0	70	96
1.000	0.000	0	1	0	1	0	0	68	81
1.000	0.000	0	0	1	0	1	1	65	75
1	0	0	0	0	1	0	1	64	85

ExampleSet (7 examples, 3 special attributes, 7 regular attributes)

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:...

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:...

Hasil\_tgs1 (LABSI-22 - v1, 11/27/19 9:13 A...

Hasil\_tgs2 (LABSI-22 - v1, 11/27/19 9:42 A...

Hasil\_tgs3 (LABSI-22 - v1, 11/27/19 9:43 A...

Hasil\_tgs4 (LABSI-22 - v1, 11/27/19 9:29 A...

Hasil\_tgs5 (LABSI-22 - v1, 11/27/19 9:47 A...

Hasil\_tgs55 (LABSI-22 - v1, 11/27/19 10:0...

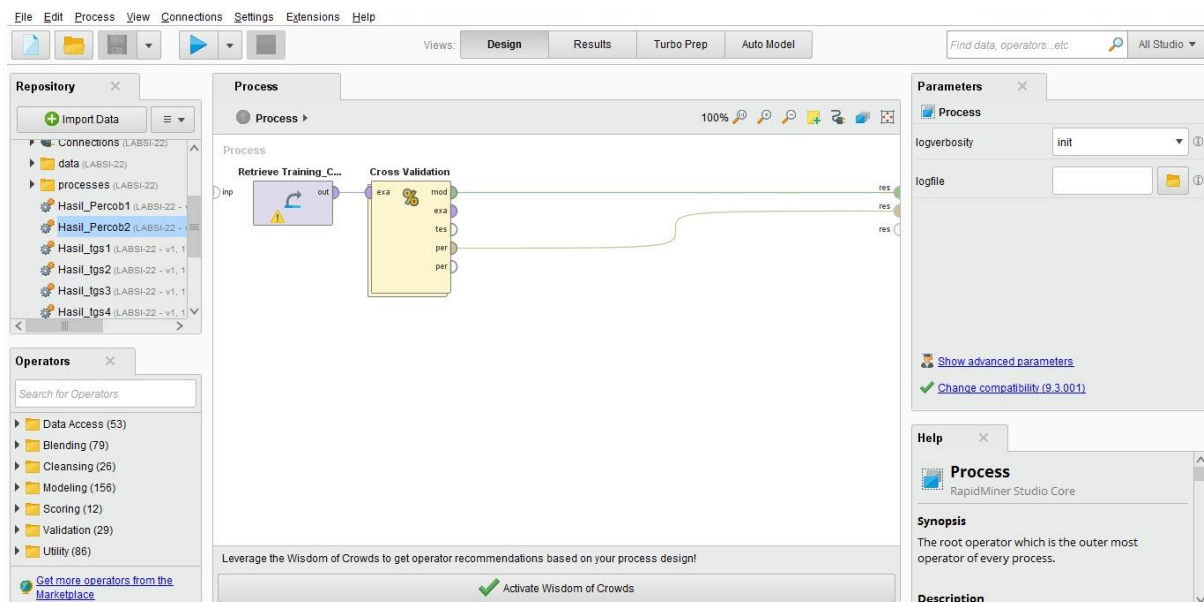
Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:...

Testing\_sekolah (LABSI-22 - v1, 11/27/19:...

Training\_Cuaca (LABSI-22 - v1, 11/27/19:...

Training\_sekolah (LABSI-22 - v1, 11/27/15:...

## 2. Mengetahui Nilai Performance Vector pada Jaringan Saraf Tiruan



File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Repository

Import Data

- Connections (LABSI-22)
- data (LABSI-22)
- processes (LABSI-22)
- Hasil\_Percob1 (LABSI-22 - v1, 1)
- Hasil\_Percob2 (LABSI-22 - v1, 1)
- Hasil\_tgs1 (LABSI-22 - v1, 1)
- Hasil\_tgs2 (LABSI-22 - v1, 1)
- Hasil\_tgs3 (LABSI-22 - v1, 1)
- Hasil\_tgs4 (LABSI-22 - v1, 1)

Operators

Search for Operators

- Data Access (53)
- Blending (79)
- Cleansing (26)
- Modeling (156)
- Scoring (12)
- Validation (29)
- Utility (86)

[Get more operators from the Marketplace](#)

Process

Process > Cross Validation

100%

Training

Nominal to Numerical

Neural Net

Testing

Nominal to Numeric...

Apply Model

Performance

Leverage the Wisdom of Crowds to get operator recommendations based on your process design!

Activate Wisdom of Crowds

Parameters

Cross Validation

leave one out

number of folds: 10

sampling type: automatic

Show advanced parameters

Change compatibility (9.3.001)

Help

Cross Validation

Concurrency

Tags: Cross-Validations, Cross-validations, Folds, K-Folds, K-folds, Validations, Estimations, Evaluations, Performances, Splitting, X-Validation, X-Prediction, Validation

Synopsis

This Operator performs a cross validation to

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History

Performance

Description

Annotations

PerformanceVector (Performance)

Table View Plot View

accuracy: 50.00% +/- 47.14% (micro average: 57.14%)

	true TIDAK	true YA	class precision
pred. TIDAK	2	3	40.00%
pred. YA	3	6	66.67%
class recall	40.00%	66.67%	

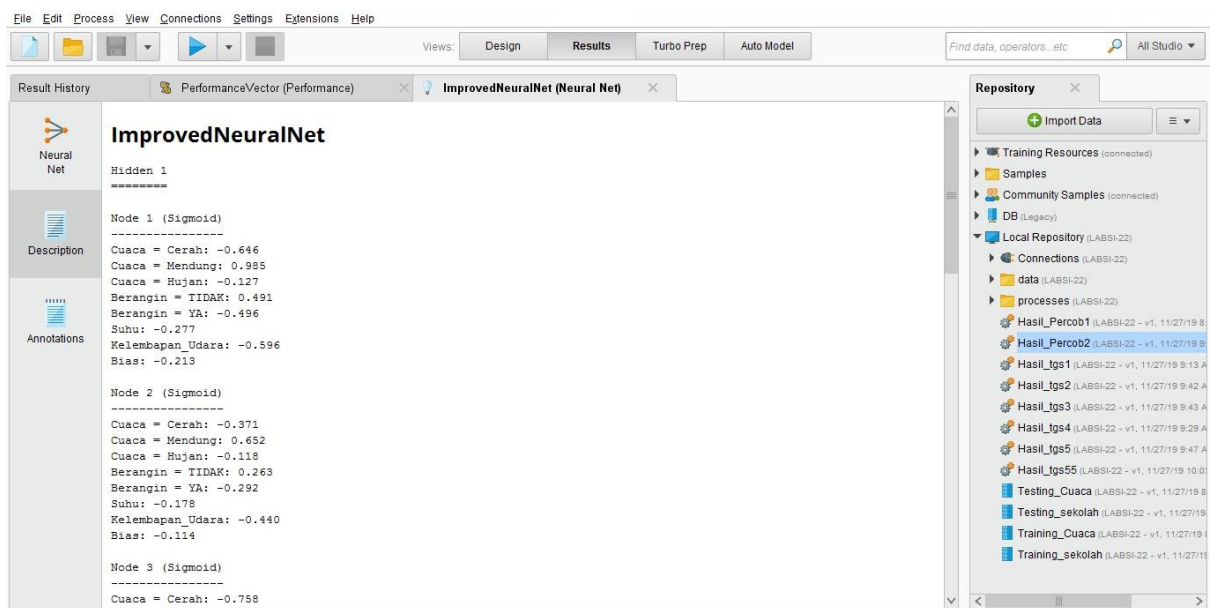
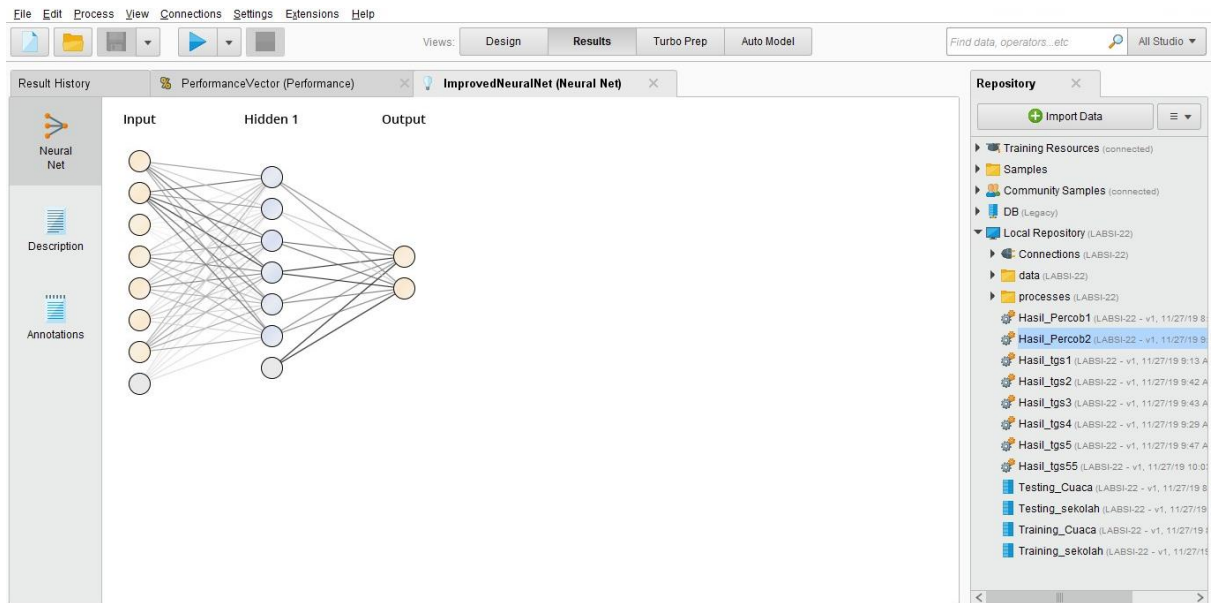
Repository

Import Data

- Training Resources (connected)
- Samples
- Community Samples (connected)
- DB (Legacy)
- Local Repository (LABSI-22)
- Connections (LABSI-22)
- data (LABSI-22)
- processes (LABSI-22)
- Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:00)
- Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:13 A)
- Hasil\_tgs1 (LABSI-22 - v1, 11/27/19 9:13 A)
- Hasil\_tgs2 (LABSI-22 - v1, 11/27/19 9:42 A)
- Hasil\_tgs3 (LABSI-22 - v1, 11/27/19 9:43 A)
- Hasil\_tgs4 (LABSI-22 - v1, 11/27/19 9:29 A)
- Hasil\_tgs5 (LABSI-22 - v1, 11/27/19 9:47 A)
- Hasil\_tgs55 (LABSI-22 - v1, 11/27/19 10:00)
- Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:00)
- Testing\_sekolah (LABSI-22 - v1, 11/27/19 8:00)
- Training\_Cuaca (LABSI-22 - v1, 11/27/19 8:00)
- Training\_sekolah (LABSI-22 - v1, 11/27/19 8:00)

Tab ImprovedNeuralNet (Neural Net), memperlihatkan arsitektur syaraf.

a) Neural Net, digunakan untuk melihat bentuk arsitektur JST



File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators... etc

Result History PerformanceVector (Performance) ImprovedNeuralNet (Neural Net)

Neural Net

Description

Annotations

Node 3 (Sigmoid)

Cuaca = Cerah: -0.758  
Cuaca = Mendung: 1.156  
Cuaca = Hujan: -0.090  
Berangin = TIDAK: 0.579  
Berangin = YA: -0.633  
Suhu: -0.310  
Kelembapan\_Udara: -0.642  
Bias: -0.197

Node 4 (Sigmoid)

Cuaca = Cerah: -1.035  
Cuaca = Mendung: 1.411  
Cuaca = Hujan: -0.099  
Berangin = TIDAK: 0.826  
Berangin = YA: -0.806  
Suhu: -0.432  
Kelembapan\_Udara: -0.708  
Bias: -0.204

Node 5 (Sigmoid)

Cuaca = Cerah: -0.677  
Cuaca = Mendung: 1.023  
Cuaca = Hujan: -0.154  
Berangin = TIDAK: 0.520  
Berangin = YA: -0.514  
Suhu: -0.291  
Kelembapan\_Udara: -0.628  
Bias: -0.224

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:42 A)

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_lgs1 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_lgs2 (LABSI-22 - v1, 11/27/19 9:42 A)

Hasil\_lgs3 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_lgs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_lgs5 (LABSI-22 - v1, 11/27/19 9:47 A)

Hasil\_lgs55 (LABSI-22 - v1, 11/27/19 10:01 A)

Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 9:13 A)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 9:42 A)

Training\_sekolah (LABSI-22 - v1, 11/27/19 9:43 A)

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators... etc

Result History PerformanceVector (Performance) ImprovedNeuralNet (Neural Net)

Neural Net

Description

Annotations

Node 6 (Sigmoid)

Cuaca = Cerah: -0.647  
Cuaca = Mendung: 1.038  
Cuaca = Hujan: -0.086  
Berangin = TIDAK: 0.550  
Berangin = YA: -0.495  
Suhu: -0.290  
Kelembapan\_Udara: -0.564  
Bias: -0.236

Output

Class 'TIDAK' (Sigmoid)

Node 1: -0.780  
Node 2: -0.384  
Node 3: -0.957  
Node 4: -1.363  
Node 5: -0.816  
Node 6: -0.804  
Threshold: 1.505

Class 'YA' (Sigmoid)

Node 1: 0.770  
Node 2: 0.326  
Node 3: 0.976  
Node 4: 1.345  
Node 5: 0.806  
Node 6: 0.806

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:42 A)

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_lgs1 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_lgs2 (LABSI-22 - v1, 11/27/19 9:42 A)

Hasil\_lgs3 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_lgs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_lgs5 (LABSI-22 - v1, 11/27/19 9:47 A)

Hasil\_lgs55 (LABSI-22 - v1, 11/27/19 10:01 A)

Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 9:13 A)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 9:42 A)

Training\_sekolah (LABSI-22 - v1, 11/27/19 9:43 A)



## TUGAS

1. File excel sebagai data training dan data testing

Table\_Tugas - Excel

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

Clipboard Font Alignment Number Conditional Formatting Styles Cell Styles Insert Delete Format Cells Editing

AutoSum Fill Clear Sort & Find & Filter Select

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_SKS	Asisten	Lama_Studi											
2	IPS	WANITA	SURAKARTA	18	TIDAK	TERLAMBAT											
3	IPA	PRIA	SURAKARTA	19	YA	TEPAT											
4	LAIN	PRIA	SURAKARTA	19	TIDAK	TERLAMBAT											
5	IPA	PRIA	LUAR	17	TIDAK	TERLAMBAT											
6	IPA	WANITA	SURAKARTA	17	TIDAK	TEPAT											
7	IPA	WANITA	LUAR	18	YA	TEPAT											
8	IPA	PRIA	SURAKARTA	18	TIDAK	TERLAMBAT											
9	IPA	PRIA	SURAKARTA	19	TIDAK	TEPAT											
10	IPS	PRIA	LUAR	18	TIDAK	TERLAMBAT											
11	LAIN	WANITA	SURAKARTA	18	TIDAK	TEPAT											
12	IPA	WANITA	SURAKARTA	19	TIDAK	TEPAT											
13	IPS	PRIA	SURAKARTA	20	TIDAK	TEPAT											
14	IPS	PRIA	SURAKARTA	19	TIDAK	TEPAT											
15	IPA	PRIA	SURAKARTA	19	TIDAK	TEPAT											
16	IPA	PRIA	LUAR	22	YA	TEPAT											
17	LAIN	PRIA	SURAKARTA	16	TIDAK	TERLAMBAT											
18	IPS	PRIA	LUAR	20	TIDAK	TEPAT											
19	LAIN	PRIA	LUAR	23	YA	TEPAT											
20	IPA	PRIA	SURAKARTA	21	YA	TEPAT											
21	IPS	PRIA	SURAKARTA	19	TIDAK	TERLAMBAT											
22																	
23																	

Sheet1 Sheet2 Sheet3 Sheet4

Tabel\_Tugas - Excel

File Home Insert Page Layout Formulas Data Review View Help Tell me what you want to do

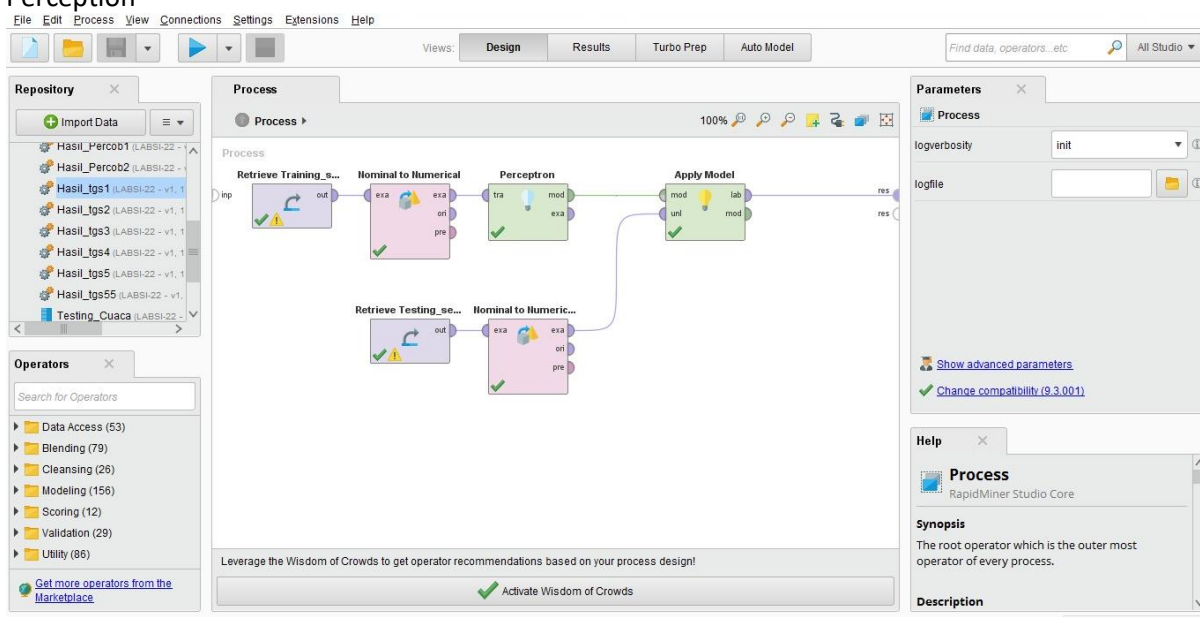
Clipboard Font Alignment Number Conditional Formatting Styles Cell Styles Insert Delete Format Editing

AutoSum Fill Clear Sort & Find & Filter Select

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Jurusan_SMA	Gender	Asal_Sekolah	Rerata_SKS	Asisten													
2	LAIN	WANITA	SURAKARTA		18 TIDAK													
3	IPA	PRIA	SURAKARTA		19 YA													
4	LAIN	PRIA	SURAKARTA		19 TIDAK													
5	IPS	PRIA	LUAR		17 TIDAK													
6	LAIN	WANITA	SURAKARTA		17 TIDAK													
7	IPA	WANITA	LUAR		18 YA													
8	IPA	PRIA	SURAKARTA		18 TIDAK													
9	IPA	PRIA	SURAKARTA		19 TIDAK													
10	IPS	PRIA	LUAR		18 TIDAK													
11	LAIN	WANITA	SURAKARTA		18 TIDAK													
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		

Sheet1 Sheet2 Sheet3 Sheet4

## 2. Hasil prediksi terhadap data testing lama studi mahasiswa dengan menggunakan model Perception



Result History: ExampleSet (Apply Model)

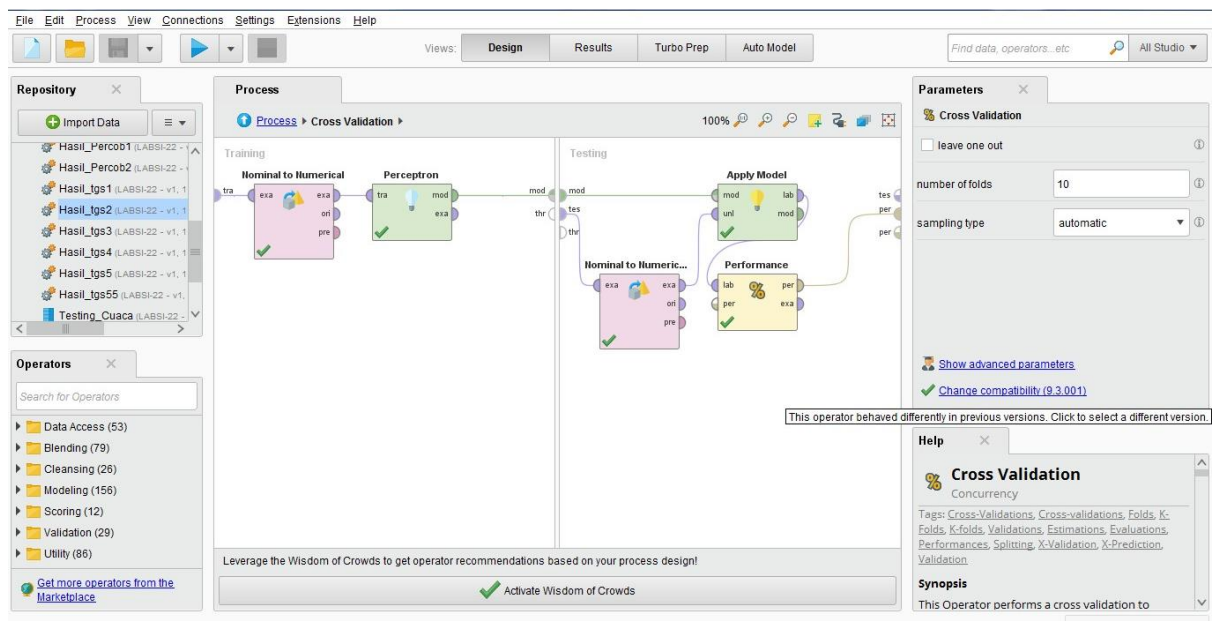
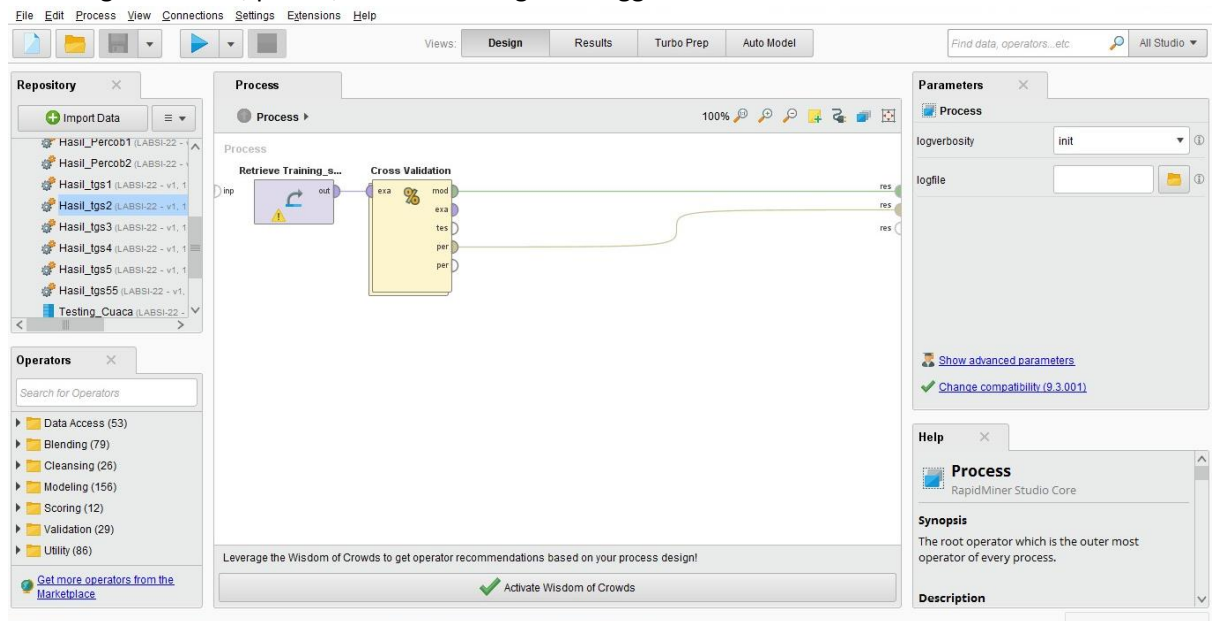
Open in: Turbo Prep | Auto Model

Filter (10 / 10 examples): all

	prediction(L...	confidence(...	confidence(...	Jurusan_S...	Jurusan_S...	Jurusan_S...	Gender = W...	Gender = PR...	Asal_Sekola...	Asal...
TEPAT	0.462	0.538	1	0	0	0	1	0	1	0
TEPAT	0.385	0.615	0	1	0	0	0	1	1	0
TERLAMBAT	0.536	0.464	1	0	0	0	0	1	1	0
TERLAMBAT	0.579	0.421	0	0	0	1	0	1	0	1
TEPAT	0.465	0.535	1	0	0	0	1	0	1	0
TEPAT	0.325	0.675	0	1	0	0	1	0	0	1
TEPAT	0.458	0.542	0	1	0	0	0	1	1	0
TEPAT	0.455	0.545	0	1	0	0	0	1	1	0
TERLAMBAT	0.576	0.424	0	0	0	1	0	1	0	1
TEPAT	0.462	0.538	1	0	0	0	1	0	1	0

ExampleSet (10 examples, 3 special attributes, 10 regular attributes)

### 3. Nilai tingkat akurasi, presisi, dan recall dengan menggunakan Performance Vector





File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History PerformanceVector (Performance) Hyperplane (Perceptron)

Criterion accuracy

Table View Plot View

accuracy: 40.00% +/- 31.62% (micro average: 40.00%)

	true TERLAMBAT	true TEPAT	class precision
pred. TERLAMBAT	4	9	30.77%
pred. TEPAT	3	4	57.14%
class recall	57.14%	30.77%	

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:13 A)

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_lgs1 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_lgs2 (LABSI-22 - v1, 11/27/19 9:42 A)

Hasil\_lgs3 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_lgs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_lgs5 (LABSI-22 - v1, 11/27/19 9:47 A)

Hasil\_lgs55 (LABSI-22 - v1, 11/27/19 10:00 A)

Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:13 A)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 9:13 A)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 9:13 A)

Training\_sekolah (LABSI-22 - v1, 11/27/19 9:13 A)

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History PerformanceVector (Performance) Hyperplane (Perceptron)

Performance

PerformanceVector:

accuracy: 40.00% +/- 31.62% (micro average: 40.00%)

ConfusionMatrix:

True:	TERLAMBAT	TEPAT
TERLAMBAT:	4	9
TEPAT:	3	4

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:13 A)

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_lgs1 (LABSI-22 - v1, 11/27/19 9:13 A)

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Hasil\_lgs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_lgs5 (LABSI-22 - v1, 11/27/19 9:47 A)

Hasil\_lgs55 (LABSI-22 - v1, 11/27/19 10:00 A)

Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:13 A)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 9:13 A)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 9:13 A)

Training\_sekolah (LABSI-22 - v1, 11/27/19 9:13 A)

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History PerformanceVector (Performance) Hyperplane (Perceptron)

**Hyperplane**

Description

Hyperplane separating TEPAT and TERLAMBAT.  
Intercept: -0.011019882381776685  
Coefficients:

Data

Annotations

w(Jurusan\_SMA = IPS) = -0.189  
w(Jurusan\_SMA = IPA) = 0.251  
w(Jurusan\_SMA = IAIN) = -0.073  
w(Gender = WANITA) = 0.150  
w(Gender = PRIA) = -0.161  
w(Asal\_Sekolah = SURABAYA) = 0.012  
w(Asal\_Sekolah = LUAR) = -0.023  
w(Asisten = TIDAK) = -0.150  
w(Asisten = YA) = 0.139  
w(Rerata\_SKS) = 0.013

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:42 A)

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_Igs1 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_Igs2 (LABSI-22 - v1, 11/27/19 9:42 A)

Hasil\_Igs3 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_Igs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_Igs5 (LABSI-22 - v1, 11/27/19 9:47 A)

Hasil\_Igs55 (LABSI-22 - v1, 11/27/19 10:01 A)

Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 8:42 A)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)

Training\_sekolah (LABSI-22 - v1, 11/27/19 8:42 A)

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History PerformanceVector (Performance) Hyperplane (Perceptron)

**Hyperplane**

Description

Data

Annotations

Attribute	Weight
Jurusan...	-0.189
Jurusan...	0.251
Jurusan...	-0.073
Gender...	0.150
Gender...	-0.161
Asal_Se...	0.012
Asal_Se...	-0.023
Asisten...	-0.150
Asisten...	0.139
Rerata...	0.013

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:42 A)

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_Igs1 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_Igs2 (LABSI-22 - v1, 11/27/19 9:42 A)

Hasil\_Igs3 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_Igs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_Igs5 (LABSI-22 - v1, 11/27/19 9:47 A)

Hasil\_Igs55 (LABSI-22 - v1, 11/27/19 10:01 A)

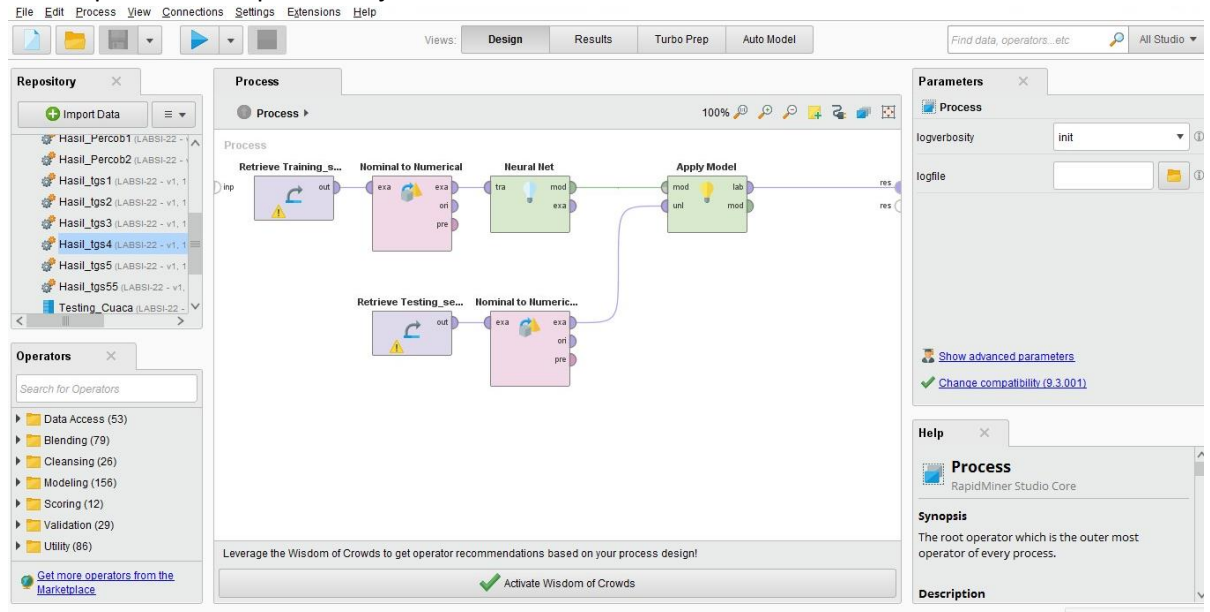
Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 8:42 A)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)

Training\_sekolah (LABSI-22 - v1, 11/27/19 8:42 A)

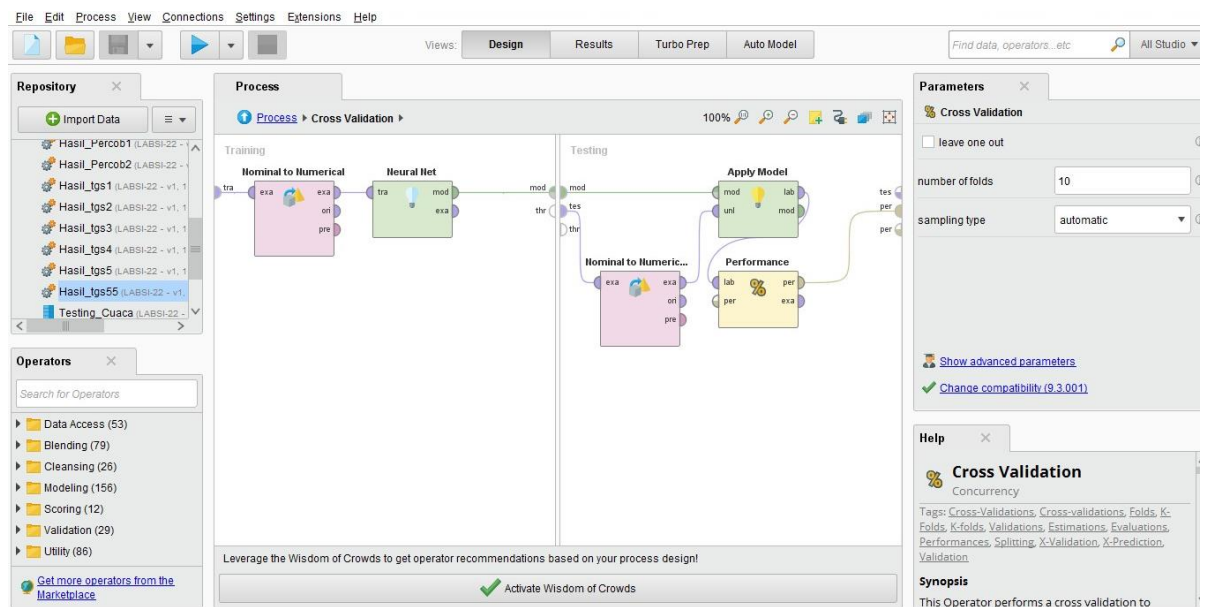
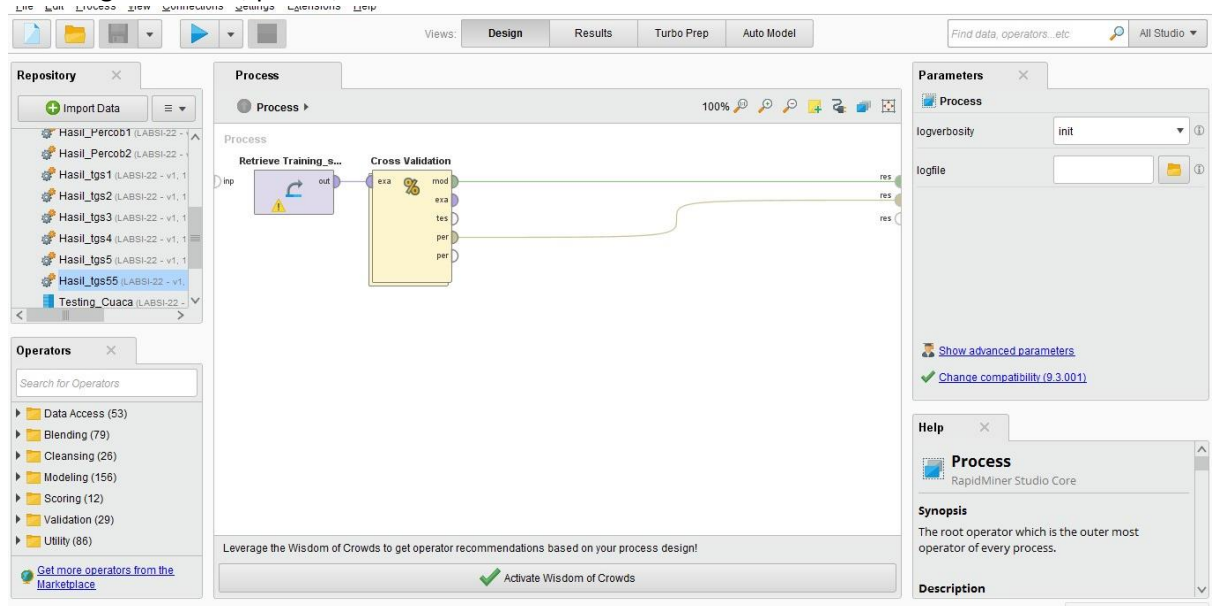
#### 4. Ganti operator Perception menjadi Natural Net



The screenshot displays the RapidMiner Studio interface in the Results view. The central workspace shows the output of the 'ExampleSet (Apply Model)' operator. The table displays 10 examples with columns for prediction, confidence, and various attributes. The right sidebar contains the 'Repository' pane with a list of data sources: 'Hasil\_Percob1', 'Hasil\_Percob2', 'Hasil\_tgs1', 'Hasil\_tgs2', 'Hasil\_tgs3', 'Hasil\_tgs4', 'Hasil\_tgs5', and 'Testing\_Cuaca'. The top menu bar includes 'File', 'Edit', 'Process', 'View', 'Connections', 'Settings', 'Extensions', and 'Help'. The bottom status bar shows 'ExampleSet (10 examples, 3 special attributes, 10 regular attributes)'.

prediction(L...	confidence(L...	confidence(L...	Jurusan_S...	Jurusan_S...	Jurusan_S...	Gender = W...	Gender = PR...	Asal_Sekola...	Asal...
TEPAT	0.331	0.669	1	0	0	1	0	1	0
TEPAT	0.027	0.973	0	1	0	0	1	1	0
TERLAMBAT	0.588	0.412	1	0	0	0	1	1	0
TERLAMBAT	0.679	0.321	0	0	1	0	1	0	1
TEPAT	0.399	0.601	1	0	0	1	0	1	0
TEPAT	0.032	0.968	0	1	0	1	0	0	1
TEPAT	0.399	0.601	0	1	0	0	1	1	0
TEPAT	0.325	0.675	0	1	0	0	1	1	0
TERLAMBAT	0.655	0.345	0	0	1	0	1	0	1
TEPAT	0.331	0.669	1	0	0	1	0	1	0

## 5. Nilai tingkat akurasi, presisi, dan real



File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History PerformanceVector (Performance) ImprovedNeuralNet (Neural Net)

Criterion accuracy

Table View Plot View

accuracy: 60.00% +/- 31.62% (micro average: 60.00%)

	true TERLAMBAT	true TEPAT	class precision
pred. TERLAMBAT	3	4	42.86%
pred. TEPAT	4	9	69.23%
class recall	42.86%	69.23%	

Repository

Import Data

- Training Resources (connected)
- Samples
- Community Samples (connected)
- DB (Legacy)
- Local Repository (LABSI-22)
  - Connections (LABSI-22)
  - data (LABSI-22)
  - processes (LABSI-22)
    - Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:42 A)
    - Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:13 A)
    - Hasil\_tgs1 (LABSI-22 - v1, 11/27/19 9:13 A)
    - Hasil\_tgs2 (LABSI-22 - v1, 11/27/19 9:43 A)
    - Hasil\_tgs3 (LABSI-22 - v1, 11/27/19 9:43 A)
    - Hasil\_tgs4 (LABSI-22 - v1, 11/27/19 9:29 A)
    - Hasil\_tgs5 (LABSI-22 - v1, 11/27/19 9:47 A)
    - Hasil\_tgs55 (LABSI-22 - v1, 11/27/19 10:00 A)
    - Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)
    - Testing\_sekolah (LABSI-22 - v1, 11/27/19 8:42 A)
    - Training\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)
    - Training\_sekolah (LABSI-22 - v1, 11/27/19 8:42 A)

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History PerformanceVector (Performance) ImprovedNeuralNet (Neural Net)

Performance

PerformanceVector

accuracy: 60.00% +/- 31.62% (micro average: 60.00%)

ConfusionMatrix:

	True: TERLAMBAT	TEPAT
TERLAMBAT:	3	4
TEPAT:	4	9

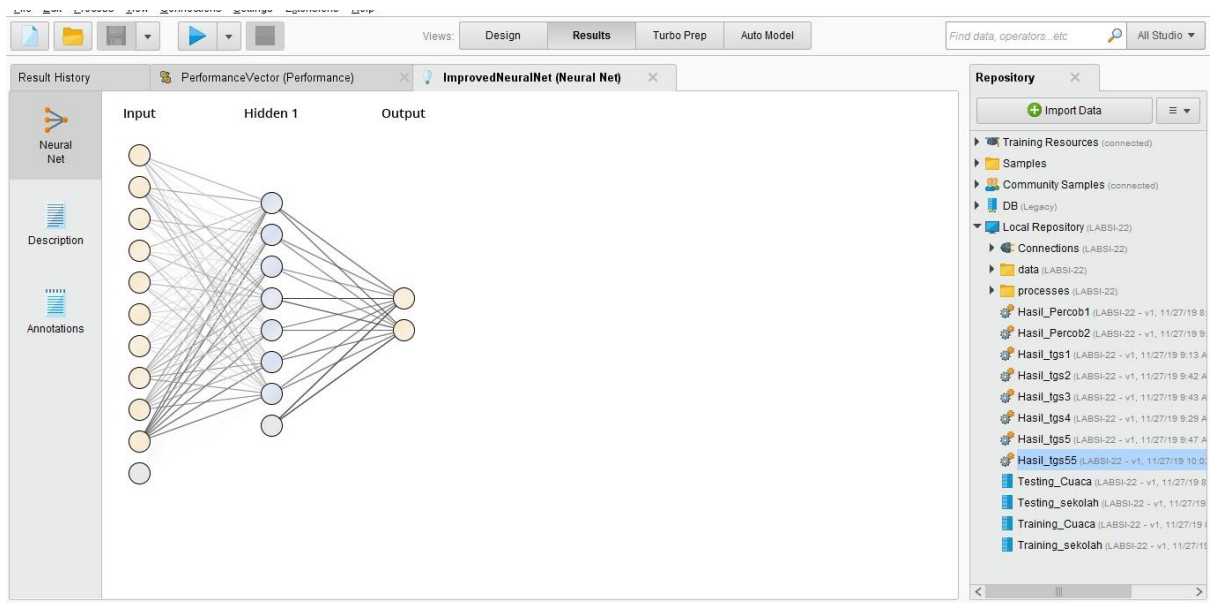
Repository

Import Data

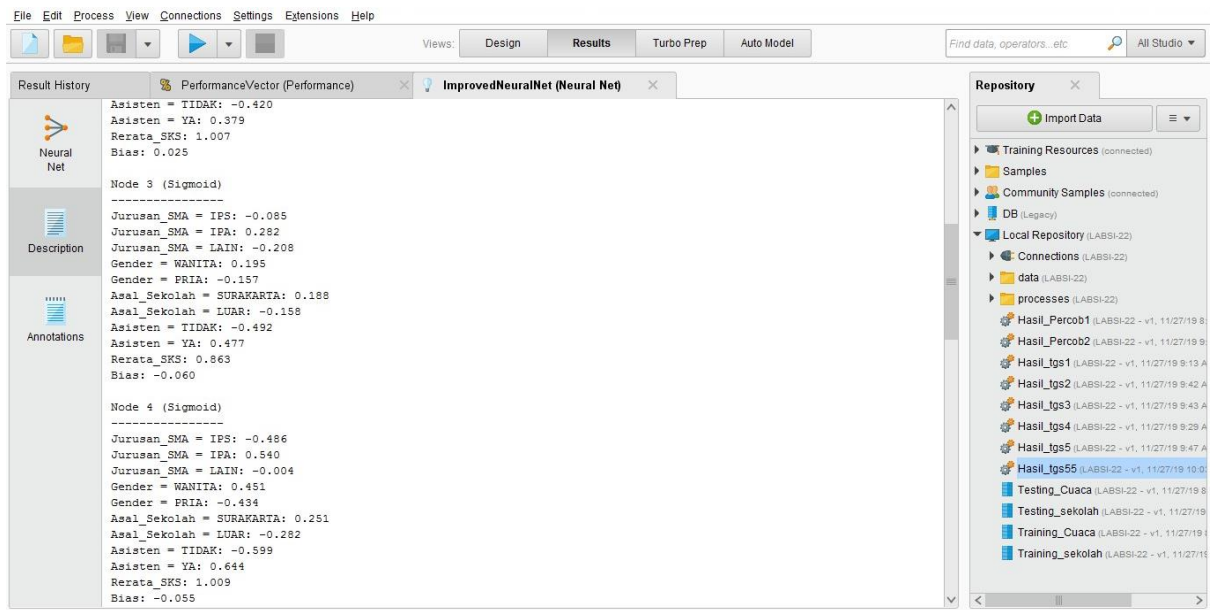
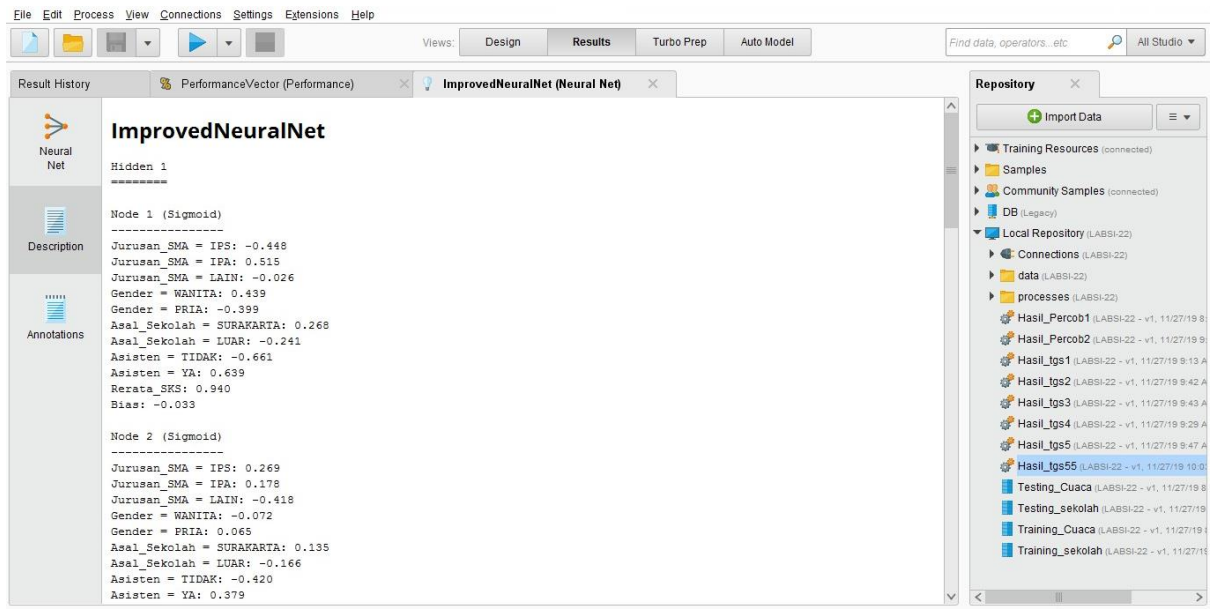
- Training Resources (connected)
- Samples
- Community Samples (connected)
- DB (Legacy)
- Local Repository (LABSI-22)
  - Connections (LABSI-22)
  - data (LABSI-22)
  - processes (LABSI-22)
    - Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:42 A)
    - Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9:13 A)
    - Hasil\_tgs1 (LABSI-22 - v1, 11/27/19 9:13 A)
    - Hasil\_tgs2 (LABSI-22 - v1, 11/27/19 9:42 A)
    - Hasil\_tgs3 (LABSI-22 - v1, 11/27/19 9:43 A)
    - Hasil\_tgs4 (LABSI-22 - v1, 11/27/19 9:29 A)
    - Hasil\_tgs5 (LABSI-22 - v1, 11/27/19 9:47 A)
    - Hasil\_tgs55 (LABSI-22 - v1, 11/27/19 10:00 A)
    - Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)
    - Testing\_sekolah (LABSI-22 - v1, 11/27/19 8:42 A)
    - Training\_Cuaca (LABSI-22 - v1, 11/27/19 8:42 A)
    - Training\_sekolah (LABSI-22 - v1, 11/27/19 8:42 A)



6. Gambar Arsitektur jaringan syaraf yg terbentuk



7. Jumlah node (simpul) masing-masing layer (lapisan) berdasarkan arsitektur JST
  - Input layer : 10 node
  - Hidden Layer : 8 node
  - Output layer : 2 node (TEPAT, TERLAMBAT)
8. Nilai-nilai bobot masing-masing node(simpul) pada hidden layer atau output layer



File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History PerformanceVector (Performance) ImprovedNeuralNet (Neural Net)

Neural Net

Description

Annotations

Node 5 (Sigmoid)

Jurusan\_SMA = IPS: 0.079  
Jurusan\_SMA = IPA: 0.202  
Jurusan\_SMA = LAIN: -0.284  
Gender = WANITA: 0.085  
Gender = PRIA: -0.068  
Asal\_Sekolah = SURAKARTA: 0.150  
Asal\_Sekolah = LUAR: -0.122  
Asisten = TIDAK: -0.410  
Asisten = YA: 0.448  
Rerata\_SKS: 0.951  
Bias: 0.041

Node 6 (Sigmoid)

Jurusan\_SMA = IPS: -0.173  
Jurusan\_SMA = IPA: 0.382  
Jurusan\_SMA = LAIN: -0.133  
Gender = WANITA: 0.248  
Gender = PRIA: -0.236  
Asal\_Sekolah = SURAKARTA: 0.201  
Asal\_Sekolah = LUAR: -0.222  
Asisten = TIDAK: -0.587  
Asisten = YA: 0.549  
Rerata\_SKS: 0.962  
Bias: 0.023

Node 7 (Sigmoid)

Jurusan\_SMA = IPS: -0.397

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8)

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9)

Hasil\_tgs1 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_tgs2 (LABSI-22 - v1, 11/27/19 9:42 A)

Hasil\_tgs3 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_tgs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_tgs5 (LABSI-22 - v1, 11/27/19 9:47 A)

Hasil\_tgs55 (LABSI-22 - v1, 11/27/19 10:0)

Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 8)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 8)

Training\_sekolah (LABSI-22 - v1, 11/27/19 8)

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators, etc. All Studio

Result History PerformanceVector (Performance) ImprovedNeuralNet (Neural Net)

Neural Net

Description

Annotations

Node 7 (Sigmoid)

Jurusan\_SMA = IPS: -0.397  
Jurusan\_SMA = IPA: 0.486  
Jurusan\_SMA = LAIN: 0.023  
Gender = WANITA: 0.411  
Gender = PRIA: -0.430  
Asal\_Sekolah = SURAKARTA: 0.187  
Asal\_Sekolah = LUAR: -0.217  
Asisten = TIDAK: -0.577  
Asisten = YA: 0.646  
Rerata\_SKS: 0.878  
Bias: -0.036

Output

Class 'TERLAMBAT' (Sigmoid)

Node 1: -0.961  
Node 2: -0.814  
Node 3: -0.681  
Node 4: -0.983  
Node 5: -0.718  
Node 6: -0.864  
Node 7: -0.862  
Threshold: 1.265

Class 'TEPAT' (Sigmoid)

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8)

Hasil\_Percob2 (LABSI-22 - v1, 11/27/19 9)

Hasil\_tgs1 (LABSI-22 - v1, 11/27/19 9:13 A)

Hasil\_tgs2 (LABSI-22 - v1, 11/27/19 9:42 A)

Hasil\_tgs3 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_tgs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_tgs5 (LABSI-22 - v1, 11/27/19 9:47 A)

Hasil\_tgs55 (LABSI-22 - v1, 11/27/19 10:0)

Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 8)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 8)

Training\_sekolah (LABSI-22 - v1, 11/27/19 8)

File Edit Process View Connections Settings Extensions Help

Views: Design Results Turbo Prep Auto Model

Find data, operators...etc. All Studio

Result History PerformanceVector (Performance) ImprovedNeuralNet (Neural Net)

Neural Net

Asai\_Sekolah = LUAR: -0.217  
Asisten = TIDAK: -0.577  
Asisten = YA: 0.646  
Rerata\_SKS: 0.878  
Bias: -0.036

Description

Output  
=====

Annotations

Class 'TERLAMBAT' (Sigmoid)

Node 1: -0.961  
Node 2: -0.814  
Node 3: -0.681  
Node 4: -0.983  
Node 5: -0.718  
Node 6: -0.864  
Node 7: -0.862  
Threshold: 1.265

Class 'TEPAT' (Sigmoid)

Node 1: 0.956  
Node 2: 0.762  
Node 3: 0.705  
Node 4: 0.995  
Node 5: 0.742  
Node 6: 0.844  
Node 7: 0.861  
Threshold: -1.257

Repository

Import Data

Training Resources (connected)

Samples

Community Samples (connected)

DB (Legacy)

Local Repository (LABSI-22)

Connections (LABSI-22)

data (LABSI-22)

processes (LABSI-22)

Hasil\_Percob1 (LABSI-22 - v1, 11/27/19 8:13 A)

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Hasil\_tgs3 (LABSI-22 - v1, 11/27/19 9:43 A)

Hasil\_tgs4 (LABSI-22 - v1, 11/27/19 9:29 A)

Hasil\_tgs5 (LABSI-22 - v1, 11/27/19 10:00 A)

Hasil\_tgs55 (LABSI-22 - v1, 11/27/19 10:00 A)

Testing\_Cuaca (LABSI-22 - v1, 11/27/19 8:13 A)

Testing\_sekolah (LABSI-22 - v1, 11/27/19 9:42 A)

Training\_Cuaca (LABSI-22 - v1, 11/27/19 9:42 A)

Training\_sekolah (LABSI-22 - v1, 11/27/19 9:42 A)