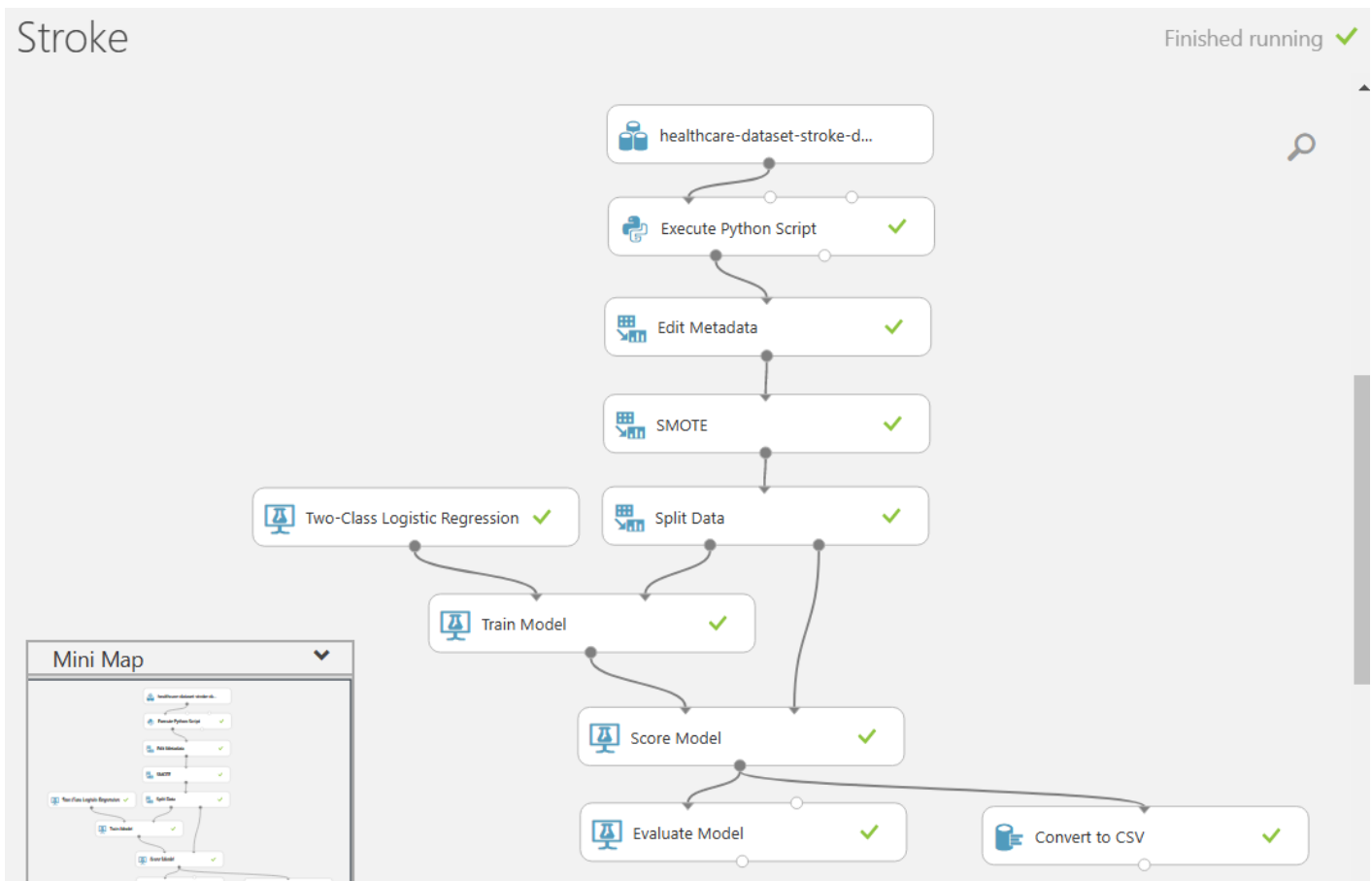


## วิธีการทำ

Stroke

Finished running ✓



1. อัปโหลด dataset ชื่อว่า healthcare-dataset-stroke-data – Copy

2. Execute Python Script ใส่โค้ด :

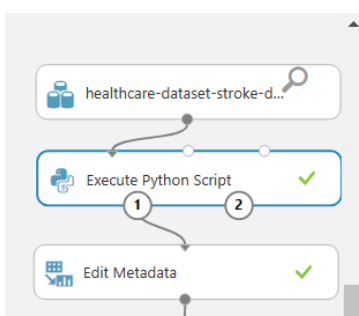
```
import pandas as pd
```

```
def azureml_main(dataframe1):
```

```
    dataframe1['bmi'] = dataframe1['bmi'].replace(['N/A'], '0')
```

```
    dataframe1['gender'] = dataframe1['gender'].replace(['Other'], 'Male')
```

```
    return dataframe1
```

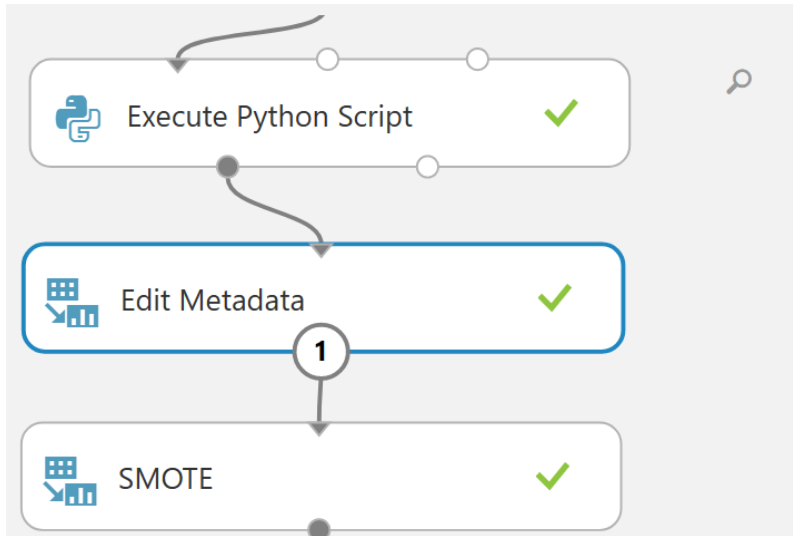


### Execute Python Script

Python script

```
1 import pandas as pd
2
3 def azureml_main(dataframe1):
4
5     dataframe1['bmi'] = dataframe1['bmi'].replace(['N/A'], '0')
6     dataframe1['gender'] = dataframe1['gender'].replace(['Other'], 'Male')
7
8     return dataframe1
```

### 3. Edit Metadata :



The workflow diagram shows three steps in a vertical sequence: 'Execute Python Script', 'Edit Metadata' (highlighted with a blue border and a circled '1'), and 'SMOTE'. Each step has a green checkmark in its top right corner. Arrows indicate the flow from 'Execute Python Script' to 'Edit Metadata', and from 'Edit Metadata' to 'SMOTE'.

**Edit Metadata**

Column  
Selected columns: stroke  
Launch column selector

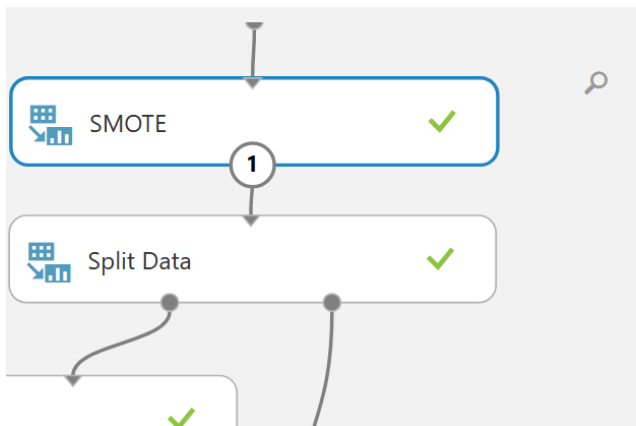
Data type  
Unchanged

Categorical  
Make categorical

Fields  
Unchanged

New column names

### 4. SMOTE :



The workflow diagram shows two steps in a vertical sequence: 'SMOTE' (highlighted with a blue border and a circled '1') and 'Split Data'. Both steps have green checkmarks. An arrow points from 'SMOTE' to 'Split Data'.

**SMOTE**

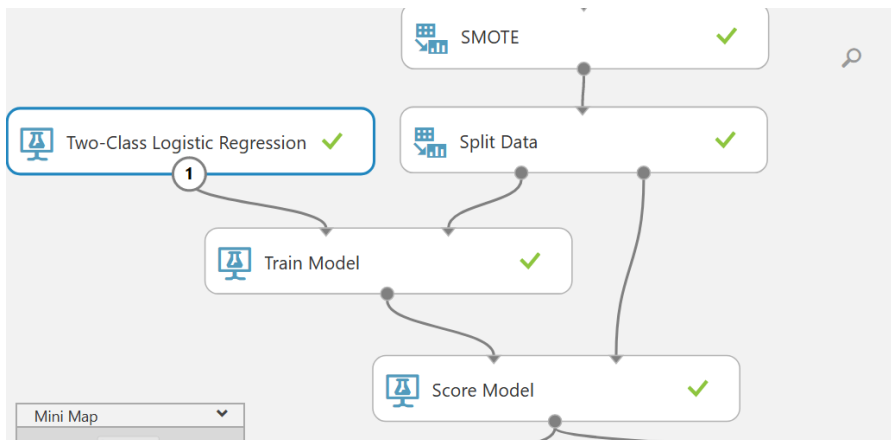
Label column  
Selected columns: stroke  
Launch column selector

SMOTE percentage  
1000

Number of nearest neighbors  
1

Random seed  
1

### 5. Two-Class Logistic Regression :



The workflow diagram shows a sequence of steps: 'Two-Class Logistic Regression' (highlighted with a blue border and a circled '1'), 'Train Model', 'Score Model', 'Split Data', and 'SMOTE'. Each step has a green checkmark. Arrows indicate the flow: 'Two-Class Logistic Regression' to 'Train Model', 'Train Model' to 'Score Model', 'Split Data' to 'Score Model', and 'SMOTE' to 'Split Data'.

**Two-Class Logistic Regression**

Create trainer mode  
Single Parameter

Optimization tolerance  
1E-07

L1 regularization weight  
1

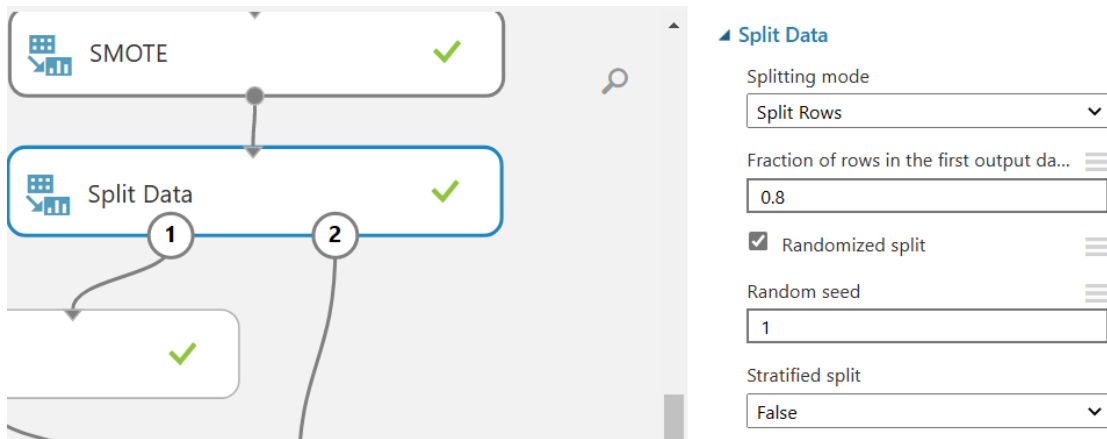
L2 regularization weight  
1

Memory size for L-BFGS  
20

Random number seed

☒ Allow unknown categorical levels

## 6. Split Data :



**Split Data**

Splitting mode  
Split Rows

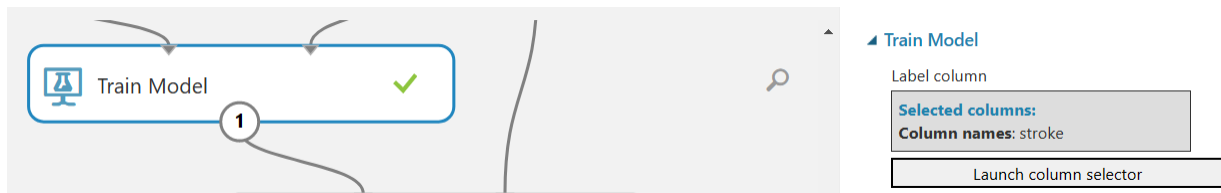
Fraction of rows in the first output da...  
0.8

☒ Randomized split

Random seed  
1

Stratified split  
False

## 7. Train Model :



**Train Model**

Label column  
Selected columns:  
Column names: stroke

Launch column selector

## 8. Score Model

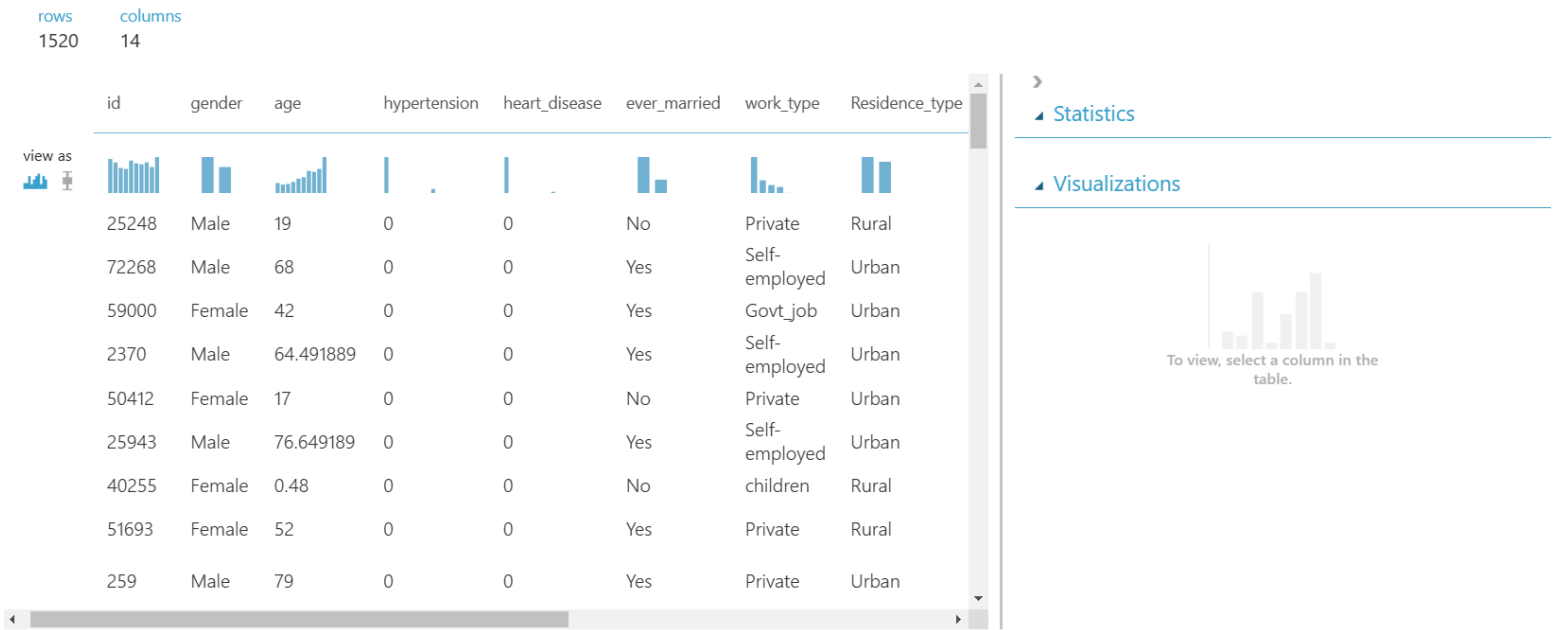
## 9. Evaluate Model

## 10. Convert to CSV

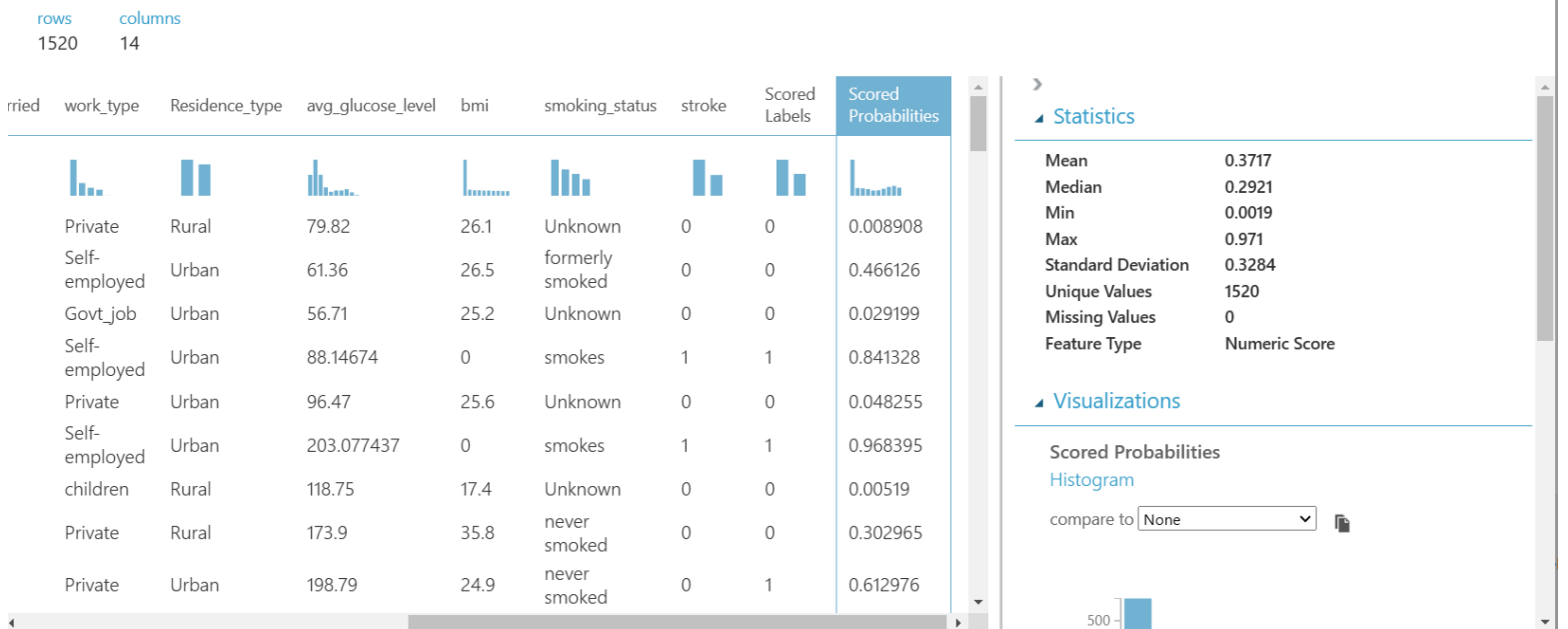
## ผลลัพธ์

### Score Model

Stroke > Score Model > Scored dataset



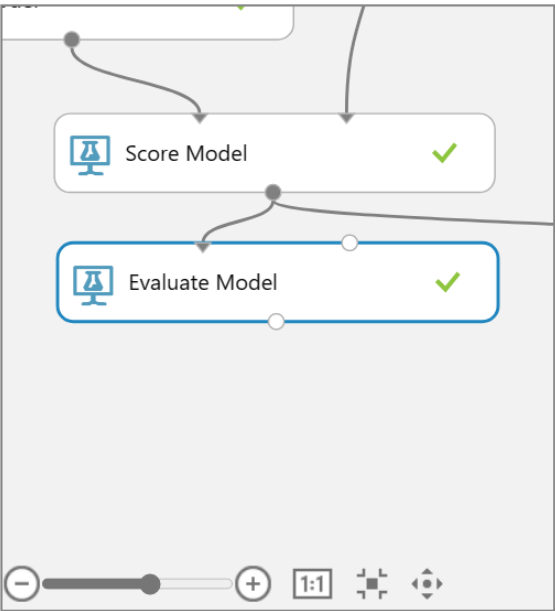
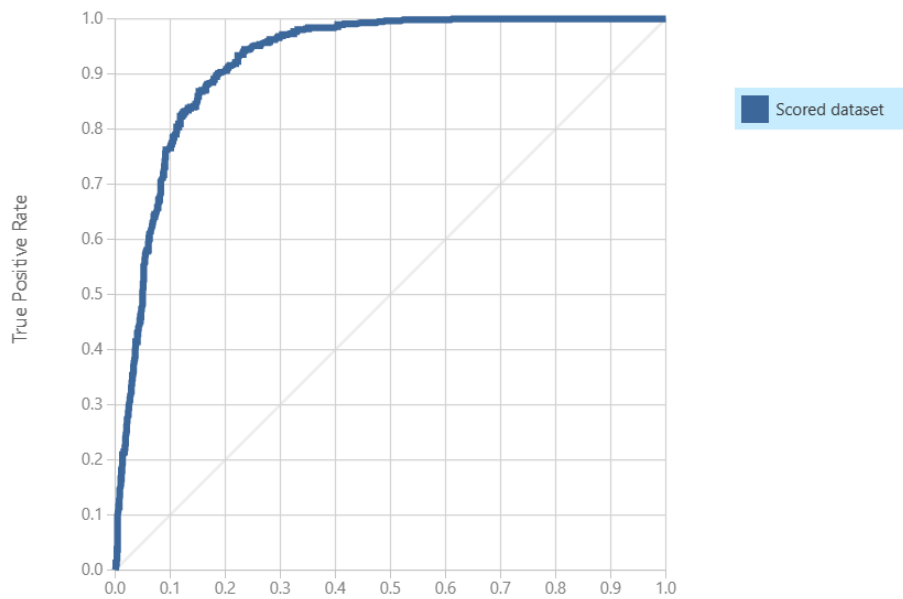
Stroke > Score Model > Scored dataset



# Evaluate Model

Stroke > Evaluate Model > Evaluation results

ROC PRECISION/RECALL LIFT



Stroke > Evaluate Model > Evaluation results

True Positive	False Negative	Accuracy	Precision	Threshold	AUC
457	98	0.859	0.796	0.5	0.924
False Positive	True Negative	Recall	F1 Score		
117	848	0.823	0.810		
Positive Label	Negative Label				
1	0				

Score Bin	Positive Examples	Negative Examples	Fraction Above Threshold	Accuracy	F1 Score	Precision	Recall	Negative Precision	Negative Recall	Cumulative AUC
(0.900,1.000]	74	8	0.054	0.678	0.232	0.902	0.133	0.666	0.992	0.001
(0.800,0.900]	132	24	0.157	0.749	0.520	0.866	0.371	0.728	0.967	0.007
(0.700,0.800]	113	21	0.245	0.810	0.688	0.858	0.575	0.794	0.945	0.017
(0.600,0.700]	82	32	0.320	0.843	0.770	0.825	0.723	0.851	0.912	0.038
(0.500,0.600]	56	32	0.378	0.859	0.810	0.796	0.823	0.896	0.879	0.064
(0.400,0.500]	32	46	0.429	0.849	0.810	0.750	0.881	0.924	0.831	0.105
(0.300,0.400]	35	67	0.496	0.828	0.801	0.695	0.944	0.960	0.762	0.168
(0.200,0.300]	19	90	0.568	0.782	0.766	0.629	0.978	0.982	0.668	0.257
(0.100,0.200]	8	111	0.646	0.714	0.717	0.561	0.993	0.993	0.553	0.371
(0.000,0.100]	4	534	1.000	0.365	0.535	0.365	1.000	1.000	0.000	0.924