Result as seen in console:

tau1 tau2 tau3 ... g4 stab stabf

0 2.959060 3.079885 8.381025 ... 0.958034 0.055347 unstable

1 9.304097 4.902524 3.047541 ... 0.781760 -0.005957 stable

2 8.971707 8.848428 3.046479 ... 0.109853 0.003471 unstable

3 0.716415 7.669600 4.486641 ... 0.362718 0.028871 unstable

4 3.134112 7.608772 4.943759 ... 0.820923 0.049860 unstable

[5 rows x 14 columns]

tau1 tau2 ... g4 stab

count 10000.000000 10000.000000 ... 10000.000000 10000.000000

mean 5.250000 5.250001 ... 0.525000 0.015731

std 2.742548 2.742549 ... 0.274255 0.036919

min 0.500793 0.500141 ... 0.050028 -0.080760

25% 2.874892 2.875140 ... 0.287494 -0.015557

50% 5.250004 5.249981 ... 0.525002 0.017142

75% 7.624690 7.624893 ... 0.762433 0.044878

max 9.999469 9.999837 ... 0.999930 0.109403

[8 rows x 13 columns]

['stable' 'stable' 'unstable' ... 'stable' 'unstable' 'unstable']

[[ 596 131]

[ 72 1201]]

In:A

Out:1332

Analysis of the results:

Detailed view of the confusion matrix:

|  |  |  |  |
| --- | --- | --- | --- |
| **Actual**  **Predicted** | Stable | Unstable | Total |
| Stable | 596 | 131 | 727 |
| Unstable | 72 | 1201 | 1273 |
| Total | 668 | 1332 | 2000 |

Accuracy:

Answers the question:

Overall, how often is the classifier correct?

Accuracy = Number of correct predictions = 596+1201 = 1797 = 0.8985

Total number of predictions 2000 2000

Accuracy = 89.85%

Precision:

Answers the question:

When it predicts unstable, how often is it correct?

Precision = Number of correct ‘unstable’ predictions =1201 = 0.9016

Total number of ‘unstable’ predictions 1332

Precision = 90.16%