Estimating the Probability of Default for Credit Card Clients

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**Introduction to the Dataset**

**Description of the Algorithms**

**Tuning Hyperparameters**

**Comparing Algorithm Performance**

**Conclusion**

**Acknowledgments**

C gamma kernel Accuracy

0 0.1 1.000 rbf 0.809208

1 0.1 1.000 poly 0.812667

2 0.1 1.000 sigmoid 0.687875

3 0.1 0.100 rbf 0.778875

4 0.1 0.100 poly 0.778708

5 0.1 0.100 sigmoid 0.778708

6 0.1 0.010 rbf 0.778708

7 0.1 0.010 poly 0.778708

8 0.1 0.010 sigmoid 0.778708

9 0.1 0.001 rbf 0.778708

10 0.1 0.001 poly 0.778708

11 0.1 0.001 sigmoid 0.778708

12 1.0 1.000 rbf 0.817708

13 1.0 1.000 poly 0.818958

14 1.0 1.000 sigmoid 0.662750

15 1.0 0.100 rbf 0.795167

16 1.0 0.100 poly 0.780375

17 1.0 0.100 sigmoid 0.790500

18 1.0 0.010 rbf 0.778708

19 1.0 0.010 poly 0.778708

20 1.0 0.010 sigmoid 0.778708

21 1.0 0.001 rbf 0.778708

22 1.0 0.001 poly 0.778708

23 1.0 0.001 sigmoid 0.778708

24 10.0 1.000 rbf 0.821208

25 10.0 1.000 poly 0.820250

26 10.0 1.000 sigmoid 0.660292

27 10.0 0.100 rbf 0.812375

28 10.0 0.100 poly 0.801542

29 10.0 0.100 sigmoid 0.724042

30 10.0 0.010 rbf 0.787292

31 10.0 0.010 poly 0.778708

32 10.0 0.010 sigmoid 0.780292

33 10.0 0.001 rbf 0.778708

34 10.0 0.001 poly 0.778708

35 10.0 0.001 sigmoid 0.778708

36 100.0 1.000 rbf 0.818625

37 100.0 1.000 poly 0.818250

38 100.0 1.000 sigmoid 0.660000

39 100.0 0.100 rbf 0.821167

40 100.0 0.100 poly 0.812708

41 100.0 0.100 sigmoid 0.703750

42 100.0 0.010 rbf 0.798917

43 100.0 0.010 poly 0.778708

44 100.0 0.010 sigmoid 0.809500

45 100.0 0.001 rbf 0.786042

46 100.0 0.001 poly 0.778708

47 100.0 0.001 sigmoid 0.780125

SVC(C=10, cache\_size=200, class\_weight=None, coef0=0.0,

decision\_function\_shape='ovr', degree=3, gamma=1, kernel='rbf', max\_iter=-1,

probability=False, random\_state=None, shrinking=True, tol=0.001,

verbose=False)