بررسی سرعت و دقت الگوریتم ها

Linear SVM:

سرعت: 30000 ایتریشن در 663.178 ثانیه

Mean accuracy=0.3772

F1 score weighted=0.3754

|  |  |  |
| --- | --- | --- |
| 3884 | 2756 | 3093 |
| 3489 | 2907 | 3358 |
| 3598 | 2307 | 4476 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | F1 score | support |
| -1 | 0.35 | 0.40 | 0.38 | 9733 |
| 0 | 0.36 | 0.30 | 0.33 | 9754 |
| 1 | 0.41 | 0.43 | 0.42 | 10381 |
| Micro avg | 0.38 | 0.38 | 0.38 | 29868 |
| Macro avg | 0.38 | 0.38 | 0.37 | 29868 |
| Weighted avg | 0.38 | 0.38 | 0.38 | 29868 |

Linear SVM PCA:

سرعت: 30000 ایتریشن در 663.178 ثانیه

Mean accuracy=0.4224

F1 score weighted=0.3708

|  |  |  |
| --- | --- | --- |
| 3242 | 1173 | 5397 |
| 4259 | 1059 | 4398 |
| 1523 | 501 | 8316 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | F1 score | support |
| -1 | 0.36 | 0.33 | 0.34 | 97812 |
| 0 | 0.39 | 0.11 | 0.17 | 9716 |
| 1 | 0.46 | 0.80 | 0.58 | 10340 |
| Micro avg | 0.42 | 0.42 | 0.42 | 29868 |
| Macro avg | 0.40 | 0.41 | 0.37 | 29868 |
| Weighted avg | 0.40 | 0.42 | 0.37 | 29868 |

Poly svm:

سرعت: 30000 ایتریشن در 365.208 ثانیه

Mean accuracy=0.6340

F1 score weighted=0.6374

|  |  |  |
| --- | --- | --- |
| 5626 | 3051 | 1193 |
| 2729 | 6239 | 757 |
| 2443 | 760 | 7070 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | F1 score | support |
| -1 | 0.52 | 0.57 | 0.54 | 9870 |
| 0 | 0.62 | 0.64 | 0.63 | 9725 |
| 1 | 0.78 | 0.69 | 0.73 | 10273 |
| Micro avg | 0.63 | 0.63 | 0.63 | 29868 |
| Macro avg | 0.64 | 0.63 | 0.64 | 29868 |
| Weighted avg | 0.64 | 0.63 | 0.64 | 29868 |

Poly svm pca:

Speed: 30000 epochs in 130.307s

Mean accuracy=0.7879

F1 score weighted=0.7869

|  |  |  |
| --- | --- | --- |
| 6058 | 3302 | 462 |
| 1756 | 8027 | 0 |
| 770 | 44 | 9449 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | precision | recall | F1 score | support |
| -1 | 0.71 | 0.62 | 0.66 | 9822 |
| 0 | 0.71 | 0.82 | 0.76 | 9783 |
| 1 | 0.95 | 0.92 | 0.94 | 10263 |
| Micro avg | 0.79 | 0.79 | 0.79 | 29868 |
| Macro avg | 0.79 | 0.79 | 0.78 | 29868 |
| Weighted avg | 0.79 | 0.79 | 0.79 | 29868 |