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| --- | --- | --- | --- | --- | --- |
| **Datasets** | **方法** | **設定值** | **正確率** | **訓練時間(秒)** | **測試時間(秒)** |
| mnist | KNN | K=3 | 97.05% | 6.95 | 202.60 |
| K=5 | 96.88% | 6.95 | 200.99 |
| SVM | POLY, D=3, γ=3 | 95.87% | 44.09 | 16.87 |
| RBF, C=0.1, γ=0.0375 | 98.18% | 102.10 | 35.26 |
| fashion-mnist | KNN | K=3 | 85.41% | 11.32 | 204.16 |
| K=5 | 85.54% | 11.36 | 200.98 |
| SVM | POLY, D=3, γ=3 | 48.85% | 27.37 | 11.01 |
| RBF, C=0.1, γ=0.0375 | 76.76 | 103.75 | 36.53 |

結論:

KNN:幾乎沒有訓練過程。只是將訓練資料與訓練資料進行距離度量來實現分類

SVM:是先在訓練集上訓練一個模型，然後用這個模型直接對測試集進行分類。這兩個步驟是獨立的。

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| --- | --- | --- | --- |
| KNN | | | |
| mnist | | fashion-mnist | |
| K=3 | K=5 | K=3 | K=5 |

|  |  |  |  |
| --- | --- | --- | --- |
| SVM | | | |
| mnist | | fashion-mnist | |
| POLY, D=3, γ=3 | RBF, C=0.1, γ=0.0375 | POLY, D=3, γ=3 | RBF, C=0.1, γ=0.0375 |