1. [LSA，SCC，LRR，LRR\_H，LRSC(P5-ADMM)，SSC\_N，SSC\_LRR(proposed)在Extended Yale B数据集上的聚类误差，运行时间和参数设置](#YaleB)

一、LSA，SCC，LRR，LRR\_H，LRSC(P5-ADMM)，SSC\_N，SSC\_LRR(proposed)在Extended Yale B数据集上的聚类误差，运行时间和参数设置, YaleBCrop025.mat

前40个例子的平均结果，每个数据每一维/max

LSA，SCC，LRR（用的lrr.m）：每个数据每一维/max

Clustering error(%) of algorithms on the Extended Yale B dataset without preprocessing the data

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | LSA | SCC | LRR  0.18 | LRR\_H  0.18 | LRSC\_P  5ADMM | SSC\_N  Rho=1 | LRSSC | Proposed |
| 2 subjects |  |  |  |  |  |  |  |  |
| Mean | 34.22 | 17.44 | 13.05 | 3.03 | 5.10 | 1.02 | 2.48 |  |
|  |  |  |  |  |  |  |  |  |
| 3 subjects |  |  |  |  |  |  |  |  |
| Mean | 57.41 | 41.69 | 30.64 | 6.03 | 8.53 | 2.79 | 6.48 |  |
|  |  |  |  |  |  |  |  |  |
| 5 subjects |  |  |  |  |  |  |  |  |
| Mean | 57.09 | 61.23 | 42.02 | 10.90 | 15.09 | 3.34 | 16.40 |  |
|  |  |  |  |  |  |  |  |  |
| 8 subjects |  |  |  |  |  |  |  |  |
| Mean | 64.61 | 69.21 | 43.46 | 26.83 | 36.54 | 10.05 | 33.67 |  |
|  |  |  |  |  |  |  |  |  |
| 10 subjects |  |  |  |  |  |  |  |  |
| Mean | 60.10 | 70.26 | 37.66 | 29.06 | 37.08 | 10.94 | 29.17 |  |

Running time（构建相似矩阵的时间+聚类时间） of algorithms on the Extended Yale B dataset without preprocessing the data

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | LSA | SCC | LRR | LRR\_H | LRSC | SSC\_N | LRSSC | Proposed |
| 2 subjects | 8.2022 | 74.7706 | 3.2580 | 3.8155 | 9.9599 | 20.8474 | 2.2464 |  |
| 3 subjects | 13.1213 | 109.9833 | 6.2761 | 6.8662 | 2.1823 | 29.5275 | 5.1166 |  |
| 5 subjects | 24.6061 | 96.4426 | 15.8907 | 16.0403 | 3.7873 | 47.8608 | 14.3579 |  |
| 8 subjects | 45.4681 | 181.2573 | 39.5150 | 40.0795 | 7.1073 | 76.6282 | 47.4586 |  |
| 10 subjects | 62.6809 | 179.8683 | 61.5868 | 62.4546 | 8.9315 | 97.3173 | 90.0427 |  |

Parameters of algorithms on the Extended Yale B dataset without preprocessing the data

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | LSA | SCC | LRR | LRR\_H | LRSC  (P5-ADMM) | SSC\_N | LRSSC | Proposed |
| Parameters |  |  |  |  | 迭代20次 |  |  |  |