Spark Configurations:

|  |  |  |
| --- | --- | --- |
| **Config: 4 cores, 9 executors, 11 GB memory** | | |
| **# Epochs** | **Computation Time** | **Accuracy** |
| 10 | 33.6s | 91.64% |
| 100 | 4min 25s | 96.92% |
| 1000 | 18min 48s | 97.7% |
| 10000 | 18min 24s | 97.46% |

|  |  |  |
| --- | --- | --- |
| **Config: 5 cores, 7 executors, 13 GB memory** | | |
| **# Epochs** | **Computation Time** | **Accuracy** |
| 10 | 41.2s | 91.7% |
| 100 | 4min 24s | 97.09% |
| 1000 | 17min 25s | 97.5% |
| 10000 | 17min 4s | 97.6% |

|  |  |  |
| --- | --- | --- |
| **Config: 6 cores, 5 executors, 19 GB memory** | | |
| **# Epochs** | **Computation Time** | **Accuracy** |
| 10 | 42s | 90.51% |
| 100 | 5min 52s | 97% |
| 1000 | 17min 7s | 97.4% |
| 10000 | 18min 13s | 97.3% |

DASK:

|  |  |  |
| --- | --- | --- |
| **Config: 4 threads, 9 workers, 11GB memory** | | |
| **# Epochs** | **Computation Time** | **Accuracy** |
| 10 | 9.45 s | 91.3% |
| 100 | 1 min 32 s | 95.4% |
| 1000 | 5 min 12s | 96.7% |
| 10000 | 5 min 12s | 96.7% |

|  |  |  |
| --- | --- | --- |
| **Config: 6threads, 5workers, 19GB memory** | | |
| **# Epochs** | **Computation Time** | **Accuracy** |
| 10 | 9.34s | 91.3% |
| 100 | 1 min 8s | 95.4% |
| 1000 | 5 min 1s | 96.7% |
| 10000 | 5 min 2s | 96.7% |

|  |  |  |
| --- | --- | --- |
| **Config: 5 threads, 7 workers, 13GB memory** | | |
| **# Epochs** | **Computation Time** | **Accuracy** |
| 10 | 9.21s | 91.3% |
| 100 | 1 min 29 s | 95.4% |
| 1000 | 5 min 4s | 96.7% |
| 10000 | 5 min 2s | 96.7% |