**优化器对比**

（lr=0.1 epoch=500 batch=32）

表1 loss图对比

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sgd | Sgdm | Adagrad | Rmsprop | Adam |
|  |  |  |  |  |

表2 ACC图对比

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sgd | Sgdm | Adagrad | Rmsprop | Adam |
|  |  |  |  |  |

表3 训练耗时（total\_time）对比

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sgd | Sgdm | Adagrad | Rmsprop | Adam |
| 6.825s | 8.568s | 7.189s | 7.521s | 9.043s |

**优化器对比**

（lr=0.01 epoch=100 batch=32）

表1 loss图对比

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sgd | Sgdm | Adagrad | Rmsprop | Adam |
|  |  |  |  |  |

表2 ACC图对比

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sgd | Sgdm | Adagrad | Rmsprop | Adam |
|  |  |  |  |  |

表3 训练耗时（total\_time）对比

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sgd | Sgdm | Adagrad | Rmsprop | Adam |
| 1.374s | 1.512s | 1.469s | 1.542s | 1.746s |