**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 |
| 2.6628899574279785 | 3.0390467643737793 | 3.2731552124023438 | 3.3285458087921143 | 3.991990089416504 |

**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 |
| 0.6563577651977539 | 0.6973268985748291 | 0.7062900066375732 | 0.9818809032440186 | 1.112379789352417 |