**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 |
| 4.885621547698975 | 5.005709409713745 | 5.252692699432373 | 5.124453067779541 | 5.863329648971558 |

**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 |
| 0.968966007232666 | 0.9963564872741699 | 1.0283091068267822 | 1.0961050987243652 | 1.3945798873901367 |