**Q1: Finding alternatives of softmax**
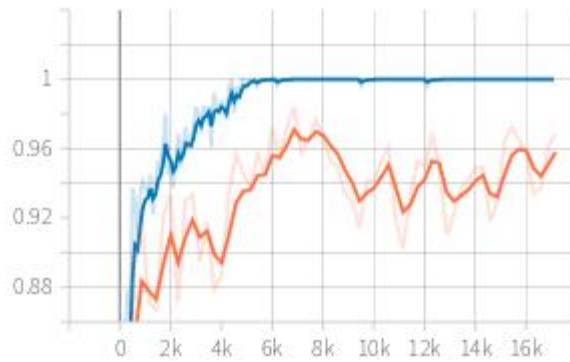
change the preds and loss:
1. softmax-loss
**accuracy_avg: 0.9844**
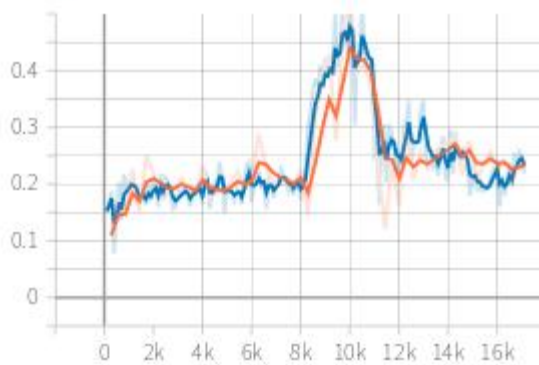


2. square-max
 **accuracy_avg: 0.251**
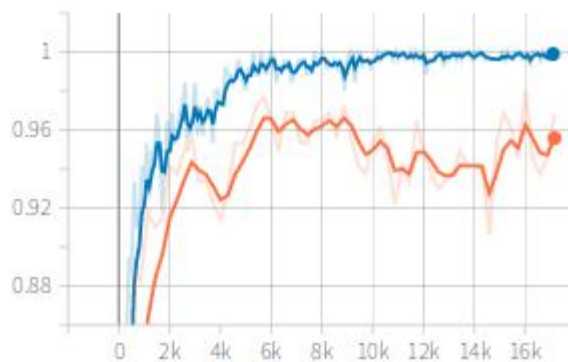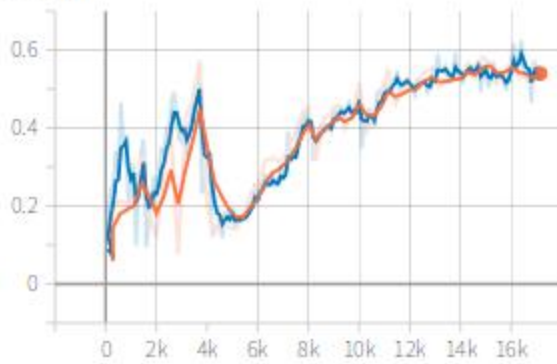


3. plus-one-abs-max
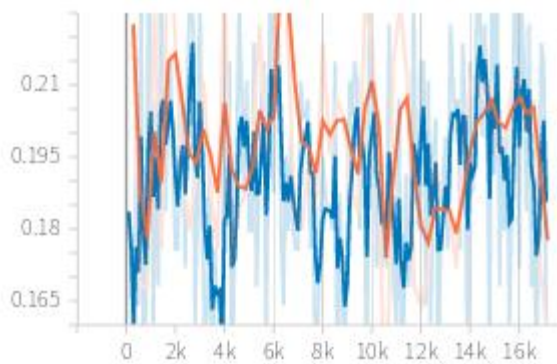**accuracy_avg: 0.9766**



4. non-negtive-max
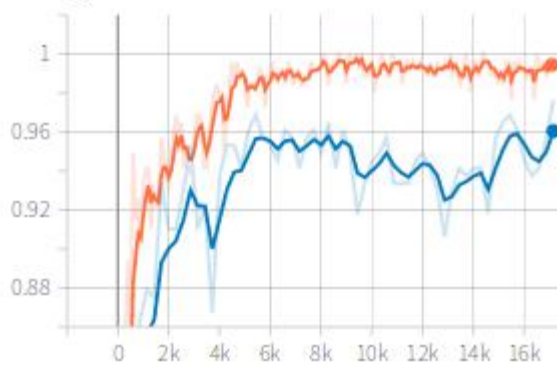**accuracy_avg: 0.550**

## 5. abs-max
**accuracy_avg: 0.206**



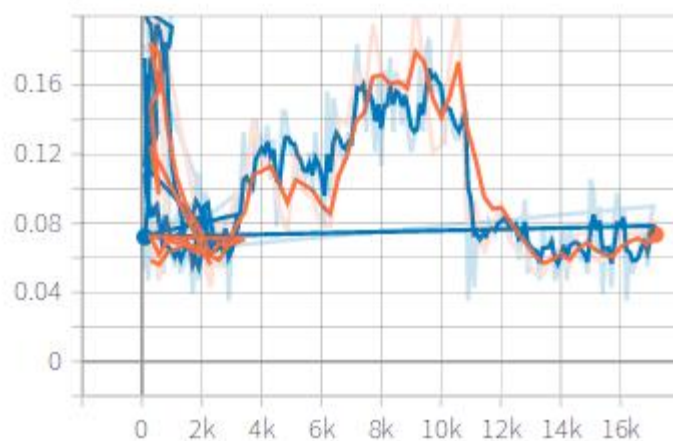## Q2: Regression vs Classification

**accuracy_avg: 0.9766**



## Q3: Lp pooling  (Should be named as q3.diff)

loss_avg: NAN accuracy_avg: None

accuracy

**Q4: Regularization**

1.Try Lp regularization with different p.
p=0:
accuracy_avg: 0.9603
p=1:
accuracy_avg: 0.9727
p=2:
accuracy_avg: 0.9844
p=3:
accuracy_avg: 0.9727
p=4:
accuracy_avg: 0.9648
p=8:
accuracy_avg: 0.9727

2. Set Lp regularization to a minus number.
accuracy_avg:0.9648



accuracy