# Discussion on the Project of Running Stochastic Gradient

Last updated: May 25, 2020

### Report Format

- Please use the template at the FAQ page
- We said this on the first day
- You want to know that for conferences, submissions with incorrect format are directly rejected
- Next time you will get 0 point directly
- Please give both your ID and name on the first page

#### Comments I

- Due to the long running time some did not run the default 500 epochs
- For this course, running a single job for several hours is typical. On my laptop, running cifar10 takes maybe 20,000 seconds. This is still acceptable.
- To reduce the running time, using a server is better than your desktop/laptop
- Using a virtual machine may not be good as the running time may increase
- Some issues mentioned in your reports have been adressed. You can see the change log

#### Comments II

- An issue that --seed 1 on mnist leads to nan is being investigated.
- Some your suggestions are not taken for various reasons.
  - For example, they may be beyond the considertation of the software at this moment
- In writing any statement you need some scientific support. Otherwise don't write it. For example, you cannot say that the higher accuracy of mnist than cifar10 is because of the 28 28 1 and 32 32 3

#### Comments III

- difference. You can easily create a data set of 32 32 3 with 100% test accuracy
- For your report you don't need to do many things beyond what we asked you to do.
  - Try to pay attention on writing your results. In particular, the organization and the workflow of your report

## Different Accuracy I

- After running 500 epochs, for cifar10, some get 66% accuracy but some get 75%
- Why?
- I can reproduce both results via --bsize 1024 (the default) and --bsize 256
- I don't blam you on using --bsize 256 as you might copy this setting from the example
- At this moment we don't know what --bsize is
- But from this example we have witnessed that the result can be significantly different under different parameters

# Grading

- Typically your score is between 70 and 90
- If yours is outside this range, either you are very good or need lots of improvements.
- I may write some comments on your report. A copy of the gradded report will be emailed to you.