

The information how to get the baseline network (three steps):

The step two is just a continuation of step one, because the job was unexpectedly interrupted. The first two steps use higher learning rate for last layer, and the third step use same learning rate for all layers.

1. finetune: bvlc_googlenet.caffemodel

parameters of training:

base_lr: 0.001, gamma: 0.8 ,momentum: 0.9, weight_decay: 0.0002, stepsize: 10000

learning rate of last layer:

(weights) lr_mult: 10, decay_mult: 10

(bias) lr_mult: 20, decay_mult: 0

learning rate of other layers:

(weights) lr_mult: 1, decay_mult: 1

(bias) lr_mult: 2, decay_mult: 0

log file: /work/cv2/haiwang/logs/google_cifar100/

train_googlenet_with_model_from_new_sp10000_lr001_gm8_dp05_higher_last_layer.e2414437

output:

/work/cv2/haiwang/model/

googlenet_cifar100_new_sp10000_lr001_gm8_dp05_higher_last_layer_iter_18750.caffemodel

(Iteration 18750, loss3/top-1 = 0.7323)

2. finetune: result from above

parameters of training:

base_lr: 0.00064, gamma: 0.8 ,momentum: 0.9, weight_decay: 0.0002, stepsize: 10000

learning rate of last layer:

(weights) lr_mult: 10, decay_mult: 10

(bias) lr_mult: 20, decay_mult: 0

learning rate of other layers:

(weights) lr_mult: 1, decay_mult: 1

(bias) lr_mult: 2, decay_mult: 0

log file: /work/cv2/haiwang/logs/google_cifar100/

train_googlenet_with_model_from_new_sp10000_lr001_gm8_dp05_higher_continue_last_layer.e2

390816

output:

/work/cv2/haiwang/model/

googlenet_cifar100_new_sp10000_lr001_gm8_dp05_higher_continue_last_layer_iter_40000.caffe

model (Iteration 40000, loss3/top-1 = 0.7668)

3. finetune: result from above

parameters of training:

base_lr: 0.000262144, gamma: 0.8 ,momentum: 0.9, weight_decay: 0.0002, stepsize: 10000

learning rate of last layer:

(weights) lr_mult: 1, decay_mult: 1

(bias) lr_mult: 2, decay_mult: 0

learning rate of other layers:

(weights) lr_mult: 1, decay_mult: 1

(bias) lr_mult: 2, decay_mult: 0

log file: /work/cv2/haiwang/logs/google_cifar100/

train_googlenet_with_model_from_new_sp10000_lr001_gm8_dp05_higher_stop_last_layer_3.e24

01905

output:

/work/cv2/haiwang/model/

googlenet_cifar100_new_sp10000_lr001_gm8_dp05_higher_stop_last_layer_3_iter_81250.caffem

odel (Iteration 81250, loss3/top-1 = 0.7932)

And then, I redo step three to get other 10 baseline models.