

user@user-pc:~/darknet\$./darknet detector train data/obj.data yolov4-tiny-custom.cfg yolov4-tiny.conv.29

Device IDs: 1
Device ID: 0
Device name: Ellesmere
Device vendor: Advanced Micro Devices, Inc.
Device opencl availability: OpenCL 1.2 AMD-APP (3180.7)
Device opencl used: 3180.7
Device double precision: YES
Device max group size: 256
Device address bits: 64

yolov4-tiny-custom
layer filters size input output
0 conv 32 3 x 3 / 2 416 x 416 x 3 -> 208 x 208 x 32 0.075 BFLOPs
1 conv 64 3 x 3 / 2 208 x 208 x 32 -> 104 x 104 x 64 0.399 BFLOPs
2 conv 64 3 x 3 / 1 104 x 104 x 64 -> 104 x 104 x 64 0.797 BFLOPs
3 route 2 4 conv 32 3 x 3 / 1 104 x 104 x 64 -> 104 x 104 x 32 0.399 BFLOPs
5 conv 32 3 x 3 / 1 104 x 104 x 32 -> 104 x 104 x 32 0.199 BFLOPs
6 route 5 4 7 conv 64 1 x 1 / 1 104 x 104 x 64 -> 104 x 104 x 64 0.089 BFLOPs
8 route 2 7 9 max 2 x 2 / 2 104 x 104 x 128 -> 52 x 52 x 128
10 conv 128 3 x 3 / 1 52 x 52 x 128 -> 52 x 52 x 128 0.797 BFLOPs
11 route 10 12 conv 64 3 x 3 / 1 52 x 52 x 128 -> 52 x 52 x 64 0.399 BFLOPs
13 conv 64 3 x 3 / 1 52 x 52 x 64 -> 52 x 52 x 64 0.199 BFLOPs
14 route 13 12 15 conv 128 1 x 1 / 1 52 x 52 x 128 -> 52 x 52 x 128 0.089 BFLOPs
16 route 10 15 17 max 2 x 2 / 2 52 x 52 x 256 -> 26 x 26 x 256
18 conv 256 3 x 3 / 1 26 x 26 x 256 -> 26 x 26 x 256 0.797 BFLOPs
19 route 18 20 conv 128 3 x 3 / 1 26 x 26 x 256 -> 26 x 26 x 128 0.399 BFLOPs
21 conv 128 3 x 3 / 1 26 x 26 x 128 -> 26 x 26 x 128 0.199 BFLOPs
22 route 21 20 23 conv 256 1 x 1 / 1 26 x 26 x 256 -> 26 x 26 x 256 0.089 BFLOPs
24 route 18 23 25 max 2 x 2 / 2 26 x 26 x 512 -> 13 x 13 x 512
26 conv 512 3 x 3 / 1 13 x 13 x 512 -> 13 x 13 x 512 0.797 BFLOPs
27 conv 256 1 x 1 / 1 13 x 13 x 512 -> 13 x 13 x 256 0.044 BFLOPs
28 conv 512 3 x 3 / 1 13 x 13 x 256 -> 13 x 13 x 512 0.399 BFLOPs
29 conv 21 1 x 1 / 1 13 x 13 x 512 -> 13 x 13 x 21 0.004 BFLOPs
30 yolov4

[yolo4] params: iou loss: ciou (4), iou_norm: 0.07, obj_norm: 1.00, cls_norm: 1.00, delta_norm: 1.00, scale_x_y: 1.05
nms_kind: greedy (1), beta = 0.600000

31 route 27 32 conv 128 1 x 1 / 1 13 x 13 x 256 -> 13 x 13 x 128 0.011 BFLOPs
33 upsample 2x 13 x 13 x 128 -> 26 x 26 x 128
34 route 33 23 35 conv 256 3 x 3 / 1 26 x 26 x 384 -> 26 x 26 x 256 1.196 BFLOPs
36 conv 21 1 x 1 / 1 26 x 26 x 256 -> 26 x 26 x 21 0.007 BFLOPs
37 yolov4

[yolo4] params: iou loss: ciou (4), iou_norm: 0.07, obj_norm: 1.00, cls_norm: 1.00, delta_norm: 1.00, scale_x_y: 1.05
nms_kind: greedy (1), beta = 0.600000

Loading weights from yolov4-tiny.conv.29...Done!

Learning Rate: 0.00261, Momentum: 0.9, Decay: 0.0005

Saving weights to backup/yolov4-tiny-custom.start.conv.weights

Loaded: 0.330733 seconds

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 12, class_loss = -nan, iou_loss = -nan)

1: nan, nan avg, 0.000000 rate, 5.554973 seconds, 32 images

Loaded: 0.000044 seconds

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 8, class_loss = nan, iou_loss = nan)

2: nan, nan avg, 0.000000 rate, 5.421394 seconds, 64 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: -nan, GIOU: -nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 13, class_loss = nan, iou_loss = nan)

3: -nan, nan avg, 0.000000 rate, 7.096011 seconds, 96 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 10, class_loss = nan, iou_loss = nan)

4: nan, nan avg, 0.000000 rate, 7.124324 seconds, 128 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 15, class_loss = -nan, iou_loss = -nan)

5: nan, nan avg, 0.000000 rate, 7.124424 seconds, 160 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 13, class_loss = -nan, iou_loss = -nan)

6: nan, nan avg, 0.000000 rate, 7.117465 seconds, 192 images

Loaded: 0.000039 seconds

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 9, class_loss = -nan, iou_loss = -nan)

7: nan, nan avg, 0.000000 rate, 7.111397 seconds, 224 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 14, class_loss = nan, iou_loss = nan)

8: nan, nan avg, 0.000000 rate, 7.117973 seconds, 256 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 9, class_loss = -nan, iou_loss = -nan)

9: nan, nan avg, 0.000000 rate, 7.116807 seconds, 288 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 18, class_loss = nan, iou_loss = nan)

10: nan, nan avg, 0.000000 rate, 7.102955 seconds, 320 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 13, class_loss = -nan, iou_loss = -nan)

11: nan, nan avg, 0.000000 rate, 7.117773 seconds, 352 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 15, class_loss = nan, iou_loss = nan)

12: nan, nan avg, 0.000000 rate, 7.099149 seconds, 384 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 11, class_loss = -nan, iou_loss = -nan)

13: nan, nan avg, 0.000000 rate, 7.106681 seconds, 416 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 11, class_loss = nan, iou_loss = nan)

14: nan, nan avg, 0.000000 rate, 7.116503 seconds, 448 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 16, class_loss = -nan, iou_loss = -nan)

15: nan, nan avg, 0.000000 rate, 7.092344 seconds, 480 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 15, class_loss = nan, iou_loss = nan)

16: nan, nan avg, 0.000000 rate, 7.117473 seconds, 512 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 14, class_loss = -nan, iou_loss = -nan)

17: nan, nan avg, 0.000000 rate, 7.122482 seconds, 544 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 13, class_loss = nan, iou_loss = nan)

18: nan, nan avg, 0.000000 rate, 7.149357 seconds, 576 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 13, class_loss = -nan, iou_loss = -nan)

19: nan, nan avg, 0.000000 rate, 7.104875 seconds, 608 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 10, class_loss = nan, iou_loss = nan)

20: nan, nan avg, 0.000000 rate, 7.089832 seconds, 640 images

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v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 30 Avg (IOU: 0.000000, GIOU: 0.000000), Class: 0.000000, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 1, class_loss = 0.0)

v3 (iou loss, Normalizer: (iou: 0.07, cls: 1.00) Region 37 Avg (IOU: nan, GIOU: nan), Class: -nan, Obj: 0.000000, No Obj: 0.000000, .5R: 0.000000, .75R: 0.000000, count: 9, class_loss = -nan, iou_loss = -nan)

