WARNING: overwriting environment variables set in the machine

overwriting variable {'CUDA\_HOME'}

(spark) C:\Users\gpu>conda activate spark

(spark) C:\Users\gpu>cd C:\Users\gpu\SparK-main\downstream\_d2

(spark) C:\Users\gpu\SparK-main\downstream\_d2>python ./train\_net.py --resume --num-gpus 1 --config-file ./configs/coco\_R\_50\_FPN\_CONV\_1x\_moco\_adam.yaml MODEL.WEIGHTS d2-style.pkl OUTPUT\_DIR C:\Users\gpu\SparK-main\downstream\_d2\output

Traceback (most recent call last):

File "./train\_net.py", line 22, in <module>

from detectron2.config import get\_cfg

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\config\\_\_init\_\_.py", line 2, in <module>

from .compat import downgrade\_config, upgrade\_config

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\config\compat.py", line 28, in <module>

from .defaults import \_C

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\config\defaults.py", line 575, in <module>

\_C.SOLVER.WEIGHT\_DECAY\_BIAS = None # None means following WEIGHT\_DECAY

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\fvcore\common\config.py", line 157, in \_\_setattr\_\_

super().\_\_setattr\_\_(name, val)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\yacs\config.py", line 155, in \_\_setattr\_\_

\_assert\_with\_logging(

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\yacs\config.py", line 521, in \_assert\_with\_logging

assert cond, msg

AssertionError: Invalid type <class 'NoneType'> for key WEIGHT\_DECAY\_BIAS; valid types = {<class 'tuple'>, <class 'list'>, <class 'bool'>, <class 'float'>, <class 'int'>, <class 'str'>}

(spark) C:\Users\gpu\SparK-main\downstream\_d2>pip install yacs --upgrade

Requirement already satisfied: yacs in c:\users\gpu\.conda\envs\spark\lib\site-packages (0.1.8)

Requirement already satisfied: PyYAML in c:\users\gpu\.conda\envs\spark\lib\site-packages (from yacs) (6.0)

(spark) C:\Users\gpu\SparK-main\downstream\_d2>pip uninstall yacs

Found existing installation: yacs 0.1.8

Uninstalling yacs-0.1.8:

Would remove:

c:\users\gpu\.conda\envs\spark\lib\site-packages\yacs-0.1.8.dist-info\\*

c:\users\gpu\.conda\envs\spark\lib\site-packages\yacs\\*

Proceed (Y/n)? y

Successfully uninstalled yacs-0.1.8

(spark) C:\Users\gpu\SparK-main\downstream\_d2>pip install yacs --upgrade

Requirement already satisfied: yacs in c:\users\gpu\.conda\envs\spark\lib\site-packages (0.1.6)

Collecting yacs

Using cached yacs-0.1.8-py3-none-any.whl (14 kB)

Requirement already satisfied: PyYAML in c:\users\gpu\.conda\envs\spark\lib\site-packages (from yacs) (6.0)

Installing collected packages: yacs

Attempting uninstall: yacs

Found existing installation: yacs 0.1.6

Uninstalling yacs-0.1.6:

Successfully uninstalled yacs-0.1.6

Successfully installed yacs-0.1.8

(spark) C:\Users\gpu\SparK-main\downstream\_d2>python ./train\_net.py --resume --num-gpus 1 --config-file ./configs/coco\_R\_50\_FPN\_CONV\_1x\_moco\_adam.yaml MODEL.WEIGHTS d2-style.pkl OUTPUT\_DIR C:\Users\gpu\SparK-main\downstream\_d2\output

Command Line Args: Namespace(config\_file='./configs/coco\_R\_50\_FPN\_CONV\_1x\_moco\_adam.yaml', dist\_url='tcp://127.0.0.1:49153', eval\_only=False, machine\_rank=0, num\_gpus=1, num\_machines=1, opts=['MODEL.WEIGHTS', 'd2-style.pkl', 'OUTPUT\_DIR', 'C:\\Users\\gpu\\SparK-main\\downstream\_d2\\output'], resume=True)

An exception occurred in telemetry logging.Disabling telemetry to prevent further exceptions.

Traceback (most recent call last):

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\iopath\common\file\_io.py", line 946, in \_\_log\_tmetry\_keys

handler.log\_event()

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\iopath\common\event\_logger.py", line 97, in log\_event

del self.\_evt

AttributeError: \_evt

[05/26 12:24:46 detectron2]: Rank of current process: 0. World size: 1

[05/26 12:24:47 detectron2]: Environment info:

------------------------------- ------------------------------------------------------------------------------------------

sys.platform win32

Python 3.8.16 (default, Mar 2 2023, 03:18:16) [MSC v.1916 64 bit (AMD64)]

numpy 1.24.3

detectron2 0.6 @C:\Users\gpu\SparK-main\downstream\_d2\detectron2

detectron2.\_C not built correctly: No module named 'detectron2.\_C'

DETECTRON2\_ENV\_MODULE <not set>

PyTorch 2.0.1 @C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch

PyTorch debug build False

torch.\_C.\_GLIBCXX\_USE\_CXX11\_ABI False

GPU available Yes

GPU 0 NVIDIA GeForce GTX 1080 (arch=6.1)

Driver version 531.14

CUDA\_HOME C:\Program - invalid!

Pillow 9.4.0

torchvision 0.15.2 @C:\Users\gpu\.conda\envs\spark\lib\site-packages\torchvision

torchvision arch flags C:\Users\gpu\.conda\envs\spark\lib\site-packages\torchvision\\_C.pyd; cannot find cuobjdump

fvcore 0.1.5.post20221221

iopath 0.1.9

cv2 4.7.0

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PyTorch built with:

- C++ Version: 199711

- MSVC 193431937

- Intel(R) Math Kernel Library Version 2020.0.2 Product Build 20200624 for Intel(R) 64 architecture applications

- Intel(R) MKL-DNN v2.7.3 (Git Hash 6dbeffbae1f23cbbeae17adb7b5b13f1f37c080e)

- OpenMP 2019

- LAPACK is enabled (usually provided by MKL)

- CPU capability usage: AVX2

- CUDA Runtime 11.8

- NVCC architecture flags: -gencode;arch=compute\_37,code=sm\_37;-gencode;arch=compute\_50,code=sm\_50;-gencode;arch=compute\_60,code=sm\_60;-gencode;arch=compute\_61,code=sm\_61;-gencode;arch=compute\_70,code=sm\_70;-gencode;arch=compute\_75,code=sm\_75;-gencode;arch=compute\_80,code=sm\_80;-gencode;arch=compute\_86,code=sm\_86;-gencode;arch=compute\_90,code=sm\_90;-gencode;arch=compute\_37,code=compute\_37

- CuDNN 8.7

- Magma 2.5.4

- Build settings: BLAS\_INFO=mkl, BUILD\_TYPE=Release, CUDA\_VERSION=11.8, CUDNN\_VERSION=8.7.0, CXX\_COMPILER=C:/cb/pytorch\_1000000000000/work/tmp\_bin/sccache-cl.exe, CXX\_FLAGS=/DWIN32 /D\_WINDOWS /GR /EHsc /w /bigobj /FS -DUSE\_PTHREADPOOL -DNDEBUG -DUSE\_KINETO -DLIBKINETO\_NOCUPTI -DLIBKINETO\_NOROCTRACER -DUSE\_FBGEMM -DUSE\_XNNPACK -DSYMBOLICATE\_MOBILE\_DEBUG\_HANDLE, LAPACK\_INFO=mkl, PERF\_WITH\_AVX=1, PERF\_WITH\_AVX2=1, PERF\_WITH\_AVX512=1, TORCH\_DISABLE\_GPU\_ASSERTS=OFF, TORCH\_VERSION=2.0.1, USE\_CUDA=ON, USE\_CUDNN=ON, USE\_EXCEPTION\_PTR=1, USE\_GFLAGS=OFF, USE\_GLOG=OFF, USE\_MKL=ON, USE\_MKLDNN=ON, USE\_MPI=OFF, USE\_NCCL=OFF, USE\_NNPACK=OFF, USE\_OPENMP=ON, USE\_ROCM=OFF,

[05/26 12:24:47 detectron2]: Command line arguments: Namespace(config\_file='./configs/coco\_R\_50\_FPN\_CONV\_1x\_moco\_adam.yaml', dist\_url='tcp://127.0.0.1:49153', eval\_only=False, machine\_rank=0, num\_gpus=1, num\_machines=1, opts=['MODEL.WEIGHTS', 'd2-style.pkl', 'OUTPUT\_DIR', 'C:\\Users\\gpu\\SparK-main\\downstream\_d2\\output'], resume=True)

[05/26 12:24:48 detectron2]: Contents of args.config\_file=./configs/coco\_R\_50\_FPN\_CONV\_1x\_moco\_adam.yaml:

\_BASE\_: "Base-RCNN-FPN.yaml"

MODEL:

WEIGHTS: "<see instructions>"

PIXEL\_MEAN: [123.675, 116.280, 103.530]

PIXEL\_STD: [58.395, 57.120, 57.375]

MASK\_ON: True

BACKBONE:

FREEZE\_AT: 0

RESNETS:

DEPTH: 50

NORM: "SyncBN"

STRIDE\_IN\_1X1: False

FPN:

NORM: "SyncBN"

ROI\_BOX\_HEAD:

NAME: "FastRCNNConvFCHead"

NUM\_FC: 1

NUM\_CONV: 4

POOLER\_RESOLUTION: 7

NORM: "SyncBN"

ROI\_MASK\_HEAD:

NAME: "MaskRCNNConvUpsampleHead"

NUM\_CONV: 4

POOLER\_RESOLUTION: 14

NORM: "SyncBN"

INPUT:

MIN\_SIZE\_TRAIN: (480, 512, 544, 576, 608, 640, 672, 704, 736, 768, 800, 832, 864, 896)

CROP:

ENABLED: False

TYPE: "absolute\_range"

SIZE: (384, 600)

FORMAT: "RGB"

TEST:

EVAL\_PERIOD: 5000

PRECISE\_BN:

ENABLED: True

SOLVER:

STEPS: (60000, 80000)

MAX\_ITER: 10

GAMMA: 0.25

BASE\_LR: 0.00025

WARMUP\_FACTOR: 0.01

WARMUP\_ITERS: 5

WEIGHT\_DECAY: 0.0001

CHECKPOINT\_PERIOD: 5000

CLIP\_GRADIENTS:

ENABLED: False

CLIP\_TYPE: "value"

CLIP\_VALUE: 1.0

NORM\_TYPE: 2.0

# compared to standard detectron2, we add these two new configurations:

OPTIMIZER: "ADAMW"

LR\_DECAY: 0.6

[05/26 12:24:48 detectron2]: Running with full config:

CUDNN\_BENCHMARK: false

DATALOADER:

ASPECT\_RATIO\_GROUPING: true

FILTER\_EMPTY\_ANNOTATIONS: true

NUM\_WORKERS: 4

REPEAT\_THRESHOLD: 0.0

SAMPLER\_TRAIN: TrainingSampler

DATASETS:

PRECOMPUTED\_PROPOSAL\_TOPK\_TEST: 1000

PRECOMPUTED\_PROPOSAL\_TOPK\_TRAIN: 2000

PROPOSAL\_FILES\_TEST: []

PROPOSAL\_FILES\_TRAIN: []

TEST:

- coco\_2017\_val

TRAIN:

- coco\_2017\_train

GLOBAL:

HACK: 1.0

INPUT:

CROP:

ENABLED: false

SIZE:

- 384

- 600

TYPE: absolute\_range

FORMAT: RGB

MASK\_FORMAT: polygon

MAX\_SIZE\_TEST: 1333

MAX\_SIZE\_TRAIN: 1333

MIN\_SIZE\_TEST: 800

MIN\_SIZE\_TRAIN:

- 480

- 512

- 544

- 576

- 608

- 640

- 672

- 704

- 736

- 768

- 800

- 832

- 864

- 896

MIN\_SIZE\_TRAIN\_SAMPLING: choice

RANDOM\_FLIP: horizontal

MODEL:

ANCHOR\_GENERATOR:

ANGLES:

- - -90

- 0

- 90

ASPECT\_RATIOS:

- - 0.5

- 1.0

- 2.0

NAME: DefaultAnchorGenerator

OFFSET: 0.0

SIZES:

- - 32

- - 64

- - 128

- - 256

- - 512

BACKBONE:

FREEZE\_AT: 0

NAME: build\_resnet\_fpn\_backbone

DEVICE: cuda

FPN:

FUSE\_TYPE: sum

IN\_FEATURES:

- res2

- res3

- res4

- res5

NORM: SyncBN

OUT\_CHANNELS: 256

KEYPOINT\_ON: false

LOAD\_PROPOSALS: false

MASK\_ON: true

META\_ARCHITECTURE: GeneralizedRCNN

PANOPTIC\_FPN:

COMBINE:

ENABLED: true

INSTANCES\_CONFIDENCE\_THRESH: 0.5

OVERLAP\_THRESH: 0.5

STUFF\_AREA\_LIMIT: 4096

INSTANCE\_LOSS\_WEIGHT: 1.0

PIXEL\_MEAN:

- 123.675

- 116.28

- 103.53

PIXEL\_STD:

- 58.395

- 57.12

- 57.375

PROPOSAL\_GENERATOR:

MIN\_SIZE: 0

NAME: RPN

RESNETS:

DEFORM\_MODULATED: false

DEFORM\_NUM\_GROUPS: 1

DEFORM\_ON\_PER\_STAGE:

- false

- false

- false

- false

DEPTH: 50

NORM: SyncBN

NUM\_GROUPS: 1

OUT\_FEATURES:

- res2

- res3

- res4

- res5

RES2\_OUT\_CHANNELS: 256

RES5\_DILATION: 1

STEM\_OUT\_CHANNELS: 64

STRIDE\_IN\_1X1: false

WIDTH\_PER\_GROUP: 64

RETINANET:

BBOX\_REG\_LOSS\_TYPE: smooth\_l1

BBOX\_REG\_WEIGHTS: &id002

- 1.0

- 1.0

- 1.0

- 1.0

FOCAL\_LOSS\_ALPHA: 0.25

FOCAL\_LOSS\_GAMMA: 2.0

IN\_FEATURES:

- p3

- p4

- p5

- p6

- p7

IOU\_LABELS:

- 0

- -1

- 1

IOU\_THRESHOLDS:

- 0.4

- 0.5

NMS\_THRESH\_TEST: 0.5

NORM: ''

NUM\_CLASSES: 80

NUM\_CONVS: 4

PRIOR\_PROB: 0.01

SCORE\_THRESH\_TEST: 0.05

SMOOTH\_L1\_LOSS\_BETA: 0.1

TOPK\_CANDIDATES\_TEST: 1000

ROI\_BOX\_CASCADE\_HEAD:

BBOX\_REG\_WEIGHTS:

- &id001

- 10.0

- 10.0

- 5.0

- 5.0

- - 20.0

- 20.0

- 10.0

- 10.0

- - 30.0

- 30.0

- 15.0

- 15.0

IOUS:

- 0.5

- 0.6

- 0.7

ROI\_BOX\_HEAD:

BBOX\_REG\_LOSS\_TYPE: smooth\_l1

BBOX\_REG\_LOSS\_WEIGHT: 1.0

BBOX\_REG\_WEIGHTS: \*id001

CLS\_AGNOSTIC\_BBOX\_REG: false

CONV\_DIM: 256

FC\_DIM: 1024

FED\_LOSS\_FREQ\_WEIGHT\_POWER: 0.5

FED\_LOSS\_NUM\_CLASSES: 50

NAME: FastRCNNConvFCHead

NORM: SyncBN

NUM\_CONV: 4

NUM\_FC: 1

POOLER\_RESOLUTION: 7

POOLER\_SAMPLING\_RATIO: 0

POOLER\_TYPE: ROIAlignV2

SMOOTH\_L1\_BETA: 0.0

TRAIN\_ON\_PRED\_BOXES: false

USE\_FED\_LOSS: false

USE\_SIGMOID\_CE: false

ROI\_HEADS:

BATCH\_SIZE\_PER\_IMAGE: 1

IN\_FEATURES:

- p2

- p3

- p4

- p5

IOU\_LABELS:

- 0

- 1

IOU\_THRESHOLDS:

- 0.5

NAME: StandardROIHeads

NMS\_THRESH\_TEST: 0.5

NUM\_CLASSES: 80

POSITIVE\_FRACTION: 0.25

PROPOSAL\_APPEND\_GT: true

SCORE\_THRESH\_TEST: 0.05

ROI\_KEYPOINT\_HEAD:

CONV\_DIMS:

- 512

- 512

- 512

- 512

- 512

- 512

- 512

- 512

LOSS\_WEIGHT: 1.0

MIN\_KEYPOINTS\_PER\_IMAGE: 1

NAME: KRCNNConvDeconvUpsampleHead

NORMALIZE\_LOSS\_BY\_VISIBLE\_KEYPOINTS: true

NUM\_KEYPOINTS: 17

POOLER\_RESOLUTION: 14

POOLER\_SAMPLING\_RATIO: 0

POOLER\_TYPE: ROIAlignV2

ROI\_MASK\_HEAD:

CLS\_AGNOSTIC\_MASK: false

CONV\_DIM: 256

NAME: MaskRCNNConvUpsampleHead

NORM: SyncBN

NUM\_CONV: 4

POOLER\_RESOLUTION: 14

POOLER\_SAMPLING\_RATIO: 0

POOLER\_TYPE: ROIAlignV2

RPN:

BATCH\_SIZE\_PER\_IMAGE: 4

BBOX\_REG\_LOSS\_TYPE: smooth\_l1

BBOX\_REG\_LOSS\_WEIGHT: 1.0

BBOX\_REG\_WEIGHTS: \*id002

BOUNDARY\_THRESH: -1

CONV\_DIMS:

- -1

HEAD\_NAME: StandardRPNHead

IN\_FEATURES:

- p2

- p3

- p4

- p5

- p6

IOU\_LABELS:

- 0

- -1

- 1

IOU\_THRESHOLDS:

- 0.3

- 0.7

LOSS\_WEIGHT: 1.0

NMS\_THRESH: 0.7

POSITIVE\_FRACTION: 0.5

POST\_NMS\_TOPK\_TEST: 1000

POST\_NMS\_TOPK\_TRAIN: 1000

PRE\_NMS\_TOPK\_TEST: 1000

PRE\_NMS\_TOPK\_TRAIN: 2000

SMOOTH\_L1\_BETA: 0.0

SEM\_SEG\_HEAD:

COMMON\_STRIDE: 4

CONVS\_DIM: 128

IGNORE\_VALUE: 255

IN\_FEATURES:

- p2

- p3

- p4

- p5

LOSS\_WEIGHT: 1.0

NAME: SemSegFPNHead

NORM: GN

NUM\_CLASSES: 54

WEIGHTS: d2-style.pkl

OUTPUT\_DIR: C:\Users\gpu\SparK-main\downstream\_d2\output

SEED: -1

SOLVER:

AMP:

ENABLED: false

BASE\_LR: 0.00025

BASE\_LR\_END: 0.0

BIAS\_LR\_FACTOR: 1.0

CHECKPOINT\_PERIOD: 5000

CLIP\_GRADIENTS:

CLIP\_TYPE: value

CLIP\_VALUE: 1.0

ENABLED: false

NORM\_TYPE: 2.0

GAMMA: 0.25

IMS\_PER\_BATCH: 16

LR\_DECAY: 0.6

LR\_SCHEDULER\_NAME: WarmupMultiStepLR

MAX\_ITER: 10

MOMENTUM: 0.9

NESTEROV: false

NUM\_DECAYS: 3

OPTIMIZER: ADAMW

REFERENCE\_WORLD\_SIZE: 0

RESCALE\_INTERVAL: false

STEPS:

- 60000

- 80000

WARMUP\_FACTOR: 0.01

WARMUP\_ITERS: 5

WARMUP\_METHOD: linear

WEIGHT\_DECAY: 0.0001

WEIGHT\_DECAY\_BIAS: null

WEIGHT\_DECAY\_NORM: 0.0

TEST:

AUG:

ENABLED: false

FLIP: true

MAX\_SIZE: 4000

MIN\_SIZES:

- 400

- 500

- 600

- 700

- 800

- 900

- 1000

- 1100

- 1200

DETECTIONS\_PER\_IMAGE: 100

EVAL\_PERIOD: 5000

EXPECTED\_RESULTS: []

KEYPOINT\_OKS\_SIGMAS: []

PRECISE\_BN:

ENABLED: true

NUM\_ITER: 200

VERSION: 2

VIS\_PERIOD: 0

[05/26 12:24:48 detectron2]: Full config saved to C:\Users\gpu\SparK-main\downstream\_d2\output\config.yaml

[05/26 12:24:48 d2.utils.env]: Using a generated random seed 48465626

[05/26 12:24:50 d2.engine.defaults]: Model:

GeneralizedRCNN(

(backbone): FPN(

(fpn\_lateral2): Conv2d(

256, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(fpn\_output2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(fpn\_lateral3): Conv2d(

512, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(fpn\_output3): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(fpn\_lateral4): Conv2d(

1024, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(fpn\_output4): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(fpn\_lateral5): Conv2d(

2048, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(fpn\_output5): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(top\_block): LastLevelMaxPool()

(bottom\_up): ResNet(

(stem): BasicStem(

(conv1): Conv2d(

3, 64, kernel\_size=(7, 7), stride=(2, 2), padding=(3, 3), bias=False

(norm): SyncBatchNorm(64, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(res2): Sequential(

(0): BottleneckBlock(

(shortcut): Conv2d(

64, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv1): Conv2d(

64, 64, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(64, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

64, 64, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(64, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

64, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(1): BottleneckBlock(

(conv1): Conv2d(

256, 64, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(64, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

64, 64, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(64, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

64, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(2): BottleneckBlock(

(conv1): Conv2d(

256, 64, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(64, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

64, 64, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(64, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

64, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

)

(res3): Sequential(

(0): BottleneckBlock(

(shortcut): Conv2d(

256, 512, kernel\_size=(1, 1), stride=(2, 2), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv1): Conv2d(

256, 128, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(128, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

128, 128, kernel\_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False

(norm): SyncBatchNorm(128, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

128, 512, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(1): BottleneckBlock(

(conv1): Conv2d(

512, 128, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(128, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

128, 128, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(128, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

128, 512, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(2): BottleneckBlock(

(conv1): Conv2d(

512, 128, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(128, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

128, 128, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(128, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

128, 512, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(3): BottleneckBlock(

(conv1): Conv2d(

512, 128, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(128, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

128, 128, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(128, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

128, 512, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

)

(res4): Sequential(

(0): BottleneckBlock(

(shortcut): Conv2d(

512, 1024, kernel\_size=(1, 1), stride=(2, 2), bias=False

(norm): SyncBatchNorm(1024, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv1): Conv2d(

512, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

256, 1024, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(1024, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(1): BottleneckBlock(

(conv1): Conv2d(

1024, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

256, 1024, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(1024, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(2): BottleneckBlock(

(conv1): Conv2d(

1024, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

256, 1024, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(1024, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(3): BottleneckBlock(

(conv1): Conv2d(

1024, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

256, 1024, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(1024, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(4): BottleneckBlock(

(conv1): Conv2d(

1024, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

256, 1024, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(1024, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(5): BottleneckBlock(

(conv1): Conv2d(

1024, 256, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

256, 1024, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(1024, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

)

(res5): Sequential(

(0): BottleneckBlock(

(shortcut): Conv2d(

1024, 2048, kernel\_size=(1, 1), stride=(2, 2), bias=False

(norm): SyncBatchNorm(2048, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv1): Conv2d(

1024, 512, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

512, 512, kernel\_size=(3, 3), stride=(2, 2), padding=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

512, 2048, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(2048, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(1): BottleneckBlock(

(conv1): Conv2d(

2048, 512, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

512, 512, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

512, 2048, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(2048, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

(2): BottleneckBlock(

(conv1): Conv2d(

2048, 512, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv2): Conv2d(

512, 512, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(512, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

(conv3): Conv2d(

512, 2048, kernel\_size=(1, 1), stride=(1, 1), bias=False

(norm): SyncBatchNorm(2048, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

)

)

)

)

)

(proposal\_generator): RPN(

(rpn\_head): StandardRPNHead(

(conv): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1)

(activation): ReLU()

)

(objectness\_logits): Conv2d(256, 3, kernel\_size=(1, 1), stride=(1, 1))

(anchor\_deltas): Conv2d(256, 12, kernel\_size=(1, 1), stride=(1, 1))

)

(anchor\_generator): DefaultAnchorGenerator(

(cell\_anchors): BufferList()

)

)

(roi\_heads): StandardROIHeads(

(box\_pooler): ROIPooler(

(level\_poolers): ModuleList(

(0): ROIAlign(output\_size=(7, 7), spatial\_scale=0.25, sampling\_ratio=0, aligned=True)

(1): ROIAlign(output\_size=(7, 7), spatial\_scale=0.125, sampling\_ratio=0, aligned=True)

(2): ROIAlign(output\_size=(7, 7), spatial\_scale=0.0625, sampling\_ratio=0, aligned=True)

(3): ROIAlign(output\_size=(7, 7), spatial\_scale=0.03125, sampling\_ratio=0, aligned=True)

)

)

(box\_head): FastRCNNConvFCHead(

(conv1): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

(activation): ReLU()

)

(conv2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

(activation): ReLU()

)

(conv3): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

(activation): ReLU()

)

(conv4): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

(activation): ReLU()

)

(flatten): Flatten(start\_dim=1, end\_dim=-1)

(fc1): Linear(in\_features=12544, out\_features=1024, bias=True)

(fc\_relu1): ReLU()

)

(box\_predictor): FastRCNNOutputLayers(

(cls\_score): Linear(in\_features=1024, out\_features=81, bias=True)

(bbox\_pred): Linear(in\_features=1024, out\_features=320, bias=True)

)

(mask\_pooler): ROIPooler(

(level\_poolers): ModuleList(

(0): ROIAlign(output\_size=(14, 14), spatial\_scale=0.25, sampling\_ratio=0, aligned=True)

(1): ROIAlign(output\_size=(14, 14), spatial\_scale=0.125, sampling\_ratio=0, aligned=True)

(2): ROIAlign(output\_size=(14, 14), spatial\_scale=0.0625, sampling\_ratio=0, aligned=True)

(3): ROIAlign(output\_size=(14, 14), spatial\_scale=0.03125, sampling\_ratio=0, aligned=True)

)

)

(mask\_head): MaskRCNNConvUpsampleHead(

(mask\_fcn1): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

(activation): ReLU()

)

(mask\_fcn2): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

(activation): ReLU()

)

(mask\_fcn3): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

(activation): ReLU()

)

(mask\_fcn4): Conv2d(

256, 256, kernel\_size=(3, 3), stride=(1, 1), padding=(1, 1), bias=False

(norm): SyncBatchNorm(256, eps=1e-05, momentum=0.1, affine=True, track\_running\_stats=True)

(activation): ReLU()

)

(deconv): ConvTranspose2d(256, 256, kernel\_size=(2, 2), stride=(2, 2))

(deconv\_relu): ReLU()

(predictor): Conv2d(256, 80, kernel\_size=(1, 1), stride=(1, 1))

)

)

)

[0.6 \*\* 0] ['backbone.fpn\_lateral2.norm.bias', 'backbone.fpn\_lateral2.norm.weight', 'backbone.fpn\_lateral2.weight', 'backbone.fpn\_lateral3.norm.bias', 'backbone.fpn\_lateral3.norm.weight', 'backbone.fpn\_lateral3.weight', 'backbone.fpn\_lateral4.norm.bias', 'backbone.fpn\_lateral4.norm.weight', 'backbone.fpn\_lateral4.weight', 'backbone.fpn\_lateral5.norm.bias', 'backbone.fpn\_lateral5.norm.weight', 'backbone.fpn\_lateral5.weight', 'backbone.fpn\_output2.norm.bias', 'backbone.fpn\_output2.norm.weight', 'backbone.fpn\_output2.weight', 'backbone.fpn\_output3.norm.bias', 'backbone.fpn\_output3.norm.weight', 'backbone.fpn\_output3.weight', 'backbone.fpn\_output4.norm.bias', 'backbone.fpn\_output4.norm.weight', 'backbone.fpn\_output4.weight', 'backbone.fpn\_output5.norm.bias', 'backbone.fpn\_output5.norm.weight', 'backbone.fpn\_output5.weight', 'proposal\_generator.rpn\_head.anchor\_deltas.bias', 'proposal\_generator.rpn\_head.anchor\_deltas.weight', 'proposal\_generator.rpn\_head.conv.bias', 'proposal\_generator.rpn\_head.conv.weight', 'proposal\_generator.rpn\_head.objectness\_logits.bias', 'proposal\_generator.rpn\_head.objectness\_logits.weight', 'roi\_heads.box\_head.conv1.norm.bias', 'roi\_heads.box\_head.conv1.norm.weight', 'roi\_heads.box\_head.conv1.weight', 'roi\_heads.box\_head.conv2.norm.bias', 'roi\_heads.box\_head.conv2.norm.weight', 'roi\_heads.box\_head.conv2.weight', 'roi\_heads.box\_head.conv3.norm.bias', 'roi\_heads.box\_head.conv3.norm.weight', 'roi\_heads.box\_head.conv3.weight', 'roi\_heads.box\_head.conv4.norm.bias', 'roi\_heads.box\_head.conv4.norm.weight', 'roi\_heads.box\_head.conv4.weight', 'roi\_heads.box\_head.fc1.bias', 'roi\_heads.box\_head.fc1.weight', 'roi\_heads.box\_predictor.bbox\_pred.bias', 'roi\_heads.box\_predictor.bbox\_pred.weight', 'roi\_heads.box\_predictor.cls\_score.bias', 'roi\_heads.box\_predictor.cls\_score.weight', 'roi\_heads.mask\_head.deconv.bias', 'roi\_heads.mask\_head.deconv.weight', 'roi\_heads.mask\_head.mask\_fcn1.norm.bias', 'roi\_heads.mask\_head.mask\_fcn1.norm.weight', 'roi\_heads.mask\_head.mask\_fcn1.weight', 'roi\_heads.mask\_head.mask\_fcn2.norm.bias', 'roi\_heads.mask\_head.mask\_fcn2.norm.weight', 'roi\_heads.mask\_head.mask\_fcn2.weight', 'roi\_heads.mask\_head.mask\_fcn3.norm.bias', 'roi\_heads.mask\_head.mask\_fcn3.norm.weight', 'roi\_heads.mask\_head.mask\_fcn3.weight', 'roi\_heads.mask\_head.mask\_fcn4.norm.bias', 'roi\_heads.mask\_head.mask\_fcn4.norm.weight', 'roi\_heads.mask\_head.mask\_fcn4.weight', 'roi\_heads.mask\_head.predictor.bias', 'roi\_heads.mask\_head.predictor.weight']

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[0.6 \*\* 3] ['backbone.bottom\_up.res4.0.conv1.norm.bias', 'backbone.bottom\_up.res4.0.conv1.norm.weight', 'backbone.bottom\_up.res4.0.conv1.weight', 'backbone.bottom\_up.res4.0.conv2.norm.bias', 'backbone.bottom\_up.res4.0.conv2.norm.weight', 'backbone.bottom\_up.res4.0.conv2.weight', 'backbone.bottom\_up.res4.0.conv3.norm.bias', 'backbone.bottom\_up.res4.0.conv3.norm.weight', 'backbone.bottom\_up.res4.0.conv3.weight', 'backbone.bottom\_up.res4.0.shortcut.norm.bias', 'backbone.bottom\_up.res4.0.shortcut.norm.weight', 'backbone.bottom\_up.res4.0.shortcut.weight', 'backbone.bottom\_up.res4.1.conv1.norm.bias', 'backbone.bottom\_up.res4.1.conv1.norm.weight', 'backbone.bottom\_up.res4.1.conv1.weight', 'backbone.bottom\_up.res4.1.conv2.norm.bias', 'backbone.bottom\_up.res4.1.conv2.norm.weight', 'backbone.bottom\_up.res4.1.conv2.weight', 'backbone.bottom\_up.res4.1.conv3.norm.bias', 'backbone.bottom\_up.res4.1.conv3.norm.weight', 'backbone.bottom\_up.res4.1.conv3.weight', 'backbone.bottom\_up.res4.2.conv1.norm.bias', 'backbone.bottom\_up.res4.2.conv1.norm.weight', 'backbone.bottom\_up.res4.2.conv1.weight', 'backbone.bottom\_up.res4.2.conv2.norm.bias', 'backbone.bottom\_up.res4.2.conv2.norm.weight', 'backbone.bottom\_up.res4.2.conv2.weight', 'backbone.bottom\_up.res4.2.conv3.norm.bias', 'backbone.bottom\_up.res4.2.conv3.norm.weight', 'backbone.bottom\_up.res4.2.conv3.weight']

[0.6 \*\* 4] ['backbone.bottom\_up.res3.0.conv1.norm.bias', 'backbone.bottom\_up.res3.0.conv1.norm.weight', 'backbone.bottom\_up.res3.0.conv1.weight', 'backbone.bottom\_up.res3.0.conv2.norm.bias', 'backbone.bottom\_up.res3.0.conv2.norm.weight', 'backbone.bottom\_up.res3.0.conv2.weight', 'backbone.bottom\_up.res3.0.conv3.norm.bias', 'backbone.bottom\_up.res3.0.conv3.norm.weight', 'backbone.bottom\_up.res3.0.conv3.weight', 'backbone.bottom\_up.res3.0.shortcut.norm.bias', 'backbone.bottom\_up.res3.0.shortcut.norm.weight', 'backbone.bottom\_up.res3.0.shortcut.weight', 'backbone.bottom\_up.res3.1.conv1.norm.bias', 'backbone.bottom\_up.res3.1.conv1.norm.weight', 'backbone.bottom\_up.res3.1.conv1.weight', 'backbone.bottom\_up.res3.1.conv2.norm.bias', 'backbone.bottom\_up.res3.1.conv2.norm.weight', 'backbone.bottom\_up.res3.1.conv2.weight', 'backbone.bottom\_up.res3.1.conv3.norm.bias', 'backbone.bottom\_up.res3.1.conv3.norm.weight', 'backbone.bottom\_up.res3.1.conv3.weight', 'backbone.bottom\_up.res3.2.conv1.norm.bias', 'backbone.bottom\_up.res3.2.conv1.norm.weight', 'backbone.bottom\_up.res3.2.conv1.weight', 'backbone.bottom\_up.res3.2.conv2.norm.bias', 'backbone.bottom\_up.res3.2.conv2.norm.weight', 'backbone.bottom\_up.res3.2.conv2.weight', 'backbone.bottom\_up.res3.2.conv3.norm.bias', 'backbone.bottom\_up.res3.2.conv3.norm.weight', 'backbone.bottom\_up.res3.2.conv3.weight', 'backbone.bottom\_up.res3.3.conv1.norm.bias', 'backbone.bottom\_up.res3.3.conv1.norm.weight', 'backbone.bottom\_up.res3.3.conv1.weight', 'backbone.bottom\_up.res3.3.conv2.norm.bias', 'backbone.bottom\_up.res3.3.conv2.norm.weight', 'backbone.bottom\_up.res3.3.conv2.weight', 'backbone.bottom\_up.res3.3.conv3.norm.bias', 'backbone.bottom\_up.res3.3.conv3.norm.weight', 'backbone.bottom\_up.res3.3.conv3.weight']

[0.6 \*\* 5] ['backbone.bottom\_up.res2.0.conv1.norm.bias', 'backbone.bottom\_up.res2.0.conv1.norm.weight', 'backbone.bottom\_up.res2.0.conv1.weight', 'backbone.bottom\_up.res2.0.conv2.norm.bias', 'backbone.bottom\_up.res2.0.conv2.norm.weight', 'backbone.bottom\_up.res2.0.conv2.weight', 'backbone.bottom\_up.res2.0.conv3.norm.bias', 'backbone.bottom\_up.res2.0.conv3.norm.weight', 'backbone.bottom\_up.res2.0.conv3.weight', 'backbone.bottom\_up.res2.0.shortcut.norm.bias', 'backbone.bottom\_up.res2.0.shortcut.norm.weight', 'backbone.bottom\_up.res2.0.shortcut.weight', 'backbone.bottom\_up.res2.1.conv1.norm.bias', 'backbone.bottom\_up.res2.1.conv1.norm.weight', 'backbone.bottom\_up.res2.1.conv1.weight', 'backbone.bottom\_up.res2.1.conv2.norm.bias', 'backbone.bottom\_up.res2.1.conv2.norm.weight', 'backbone.bottom\_up.res2.1.conv2.weight', 'backbone.bottom\_up.res2.1.conv3.norm.bias', 'backbone.bottom\_up.res2.1.conv3.norm.weight', 'backbone.bottom\_up.res2.1.conv3.weight', 'backbone.bottom\_up.res2.2.conv1.norm.bias', 'backbone.bottom\_up.res2.2.conv1.norm.weight', 'backbone.bottom\_up.res2.2.conv1.weight', 'backbone.bottom\_up.res2.2.conv2.norm.bias', 'backbone.bottom\_up.res2.2.conv2.norm.weight', 'backbone.bottom\_up.res2.2.conv2.weight', 'backbone.bottom\_up.res2.2.conv3.norm.bias', 'backbone.bottom\_up.res2.2.conv3.norm.weight', 'backbone.bottom\_up.res2.2.conv3.weight']

[0.6 \*\* 6] ['backbone.bottom\_up.stem.conv1.norm.bias', 'backbone.bottom\_up.stem.conv1.norm.weight', 'backbone.bottom\_up.stem.conv1.weight']

[05/26 12:25:13 d2.data.datasets.coco]: Loading datasets\coco/annotations/instances\_train2017.json takes 22.63 seconds.

[05/26 12:25:14 d2.data.datasets.coco]: Loaded 118287 images in COCO format from datasets\coco/annotations/instances\_train2017.json

[05/26 12:25:21 d2.data.build]: Removed 1021 images with no usable annotations. 117266 images left.

[05/26 12:25:21 d2.data.dataset\_mapper]: [DatasetMapper] Augmentations used in training: [ResizeShortestEdge(short\_edge\_length=(480, 512, 544, 576, 608, 640, 672, 704, 736, 768, 800, 832, 864, 896), max\_size=1333, sample\_style='choice'), RandomFlip()]

[05/26 12:25:21 d2.data.build]: Using training sampler TrainingSampler

[05/26 12:25:21 d2.data.common]: Serializing the dataset using: <class 'detectron2.data.common.\_TorchSerializedList'>

[05/26 12:25:21 d2.data.common]: Serializing 117266 elements to byte tensors and concatenating them all ...

[05/26 12:25:24 d2.data.common]: Serialized dataset takes 451.21 MiB

WARNING [05/26 12:25:26 d2.solver.build]: SOLVER.STEPS contains values larger than SOLVER.MAX\_ITER. These values will be ignored.

[05/26 12:25:44 d2.data.datasets.coco]: Loading datasets\coco/annotations/instances\_train2017.json takes 18.44 seconds.

[05/26 12:25:45 d2.data.datasets.coco]: Loaded 118287 images in COCO format from datasets\coco/annotations/instances\_train2017.json

[05/26 12:25:52 d2.data.build]: Removed 1021 images with no usable annotations. 117266 images left.

[05/26 12:25:52 d2.data.dataset\_mapper]: [DatasetMapper] Augmentations used in training: [ResizeShortestEdge(short\_edge\_length=(480, 512, 544, 576, 608, 640, 672, 704, 736, 768, 800, 832, 864, 896), max\_size=1333, sample\_style='choice'), RandomFlip()]

[05/26 12:25:52 d2.data.build]: Using training sampler TrainingSampler

[05/26 12:25:52 d2.data.common]: Serializing the dataset using: <class 'detectron2.data.common.\_TorchSerializedList'>

[05/26 12:25:52 d2.data.common]: Serializing 117266 elements to byte tensors and concatenating them all ...

[05/26 12:25:55 d2.data.common]: Serialized dataset takes 451.21 MiB

[05/26 12:25:56 d2.checkpoint.detection\_checkpoint]: [DetectionCheckpointer] Loading from d2-style.pkl ...

[05/26 12:25:56 fvcore.common.checkpoint]: [Checkpointer] Loading from d2-style.pkl ...

[05/26 12:25:57 fvcore.common.checkpoint]: Reading a file from 'https://github.com/keyu-tian/SparK'

[05/26 12:25:58 d2.checkpoint.c2\_model\_loading]: Following weights matched with submodule backbone.bottom\_up:

| Names in Model | Names in Checkpoint | Shapes |

|:------------------|:-----------------------------------------------------------------------------------------------------------|:---------------------------------------------------|

| res2.0.conv1.\* | res2.0.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (64,) () (64,) (64,) (64,) (64,64,1,1) |

| res2.0.conv2.\* | res2.0.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (64,) () (64,) (64,) (64,) (64,64,3,3) |

| res2.0.conv3.\* | res2.0.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,64,1,1) |

| res2.0.shortcut.\* | res2.0.shortcut.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,64,1,1) |

| res2.1.conv1.\* | res2.1.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (64,) () (64,) (64,) (64,) (64,256,1,1) |

| res2.1.conv2.\* | res2.1.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (64,) () (64,) (64,) (64,) (64,64,3,3) |

| res2.1.conv3.\* | res2.1.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,64,1,1) |

| res2.2.conv1.\* | res2.2.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (64,) () (64,) (64,) (64,) (64,256,1,1) |

| res2.2.conv2.\* | res2.2.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (64,) () (64,) (64,) (64,) (64,64,3,3) |

| res2.2.conv3.\* | res2.2.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,64,1,1) |

| res3.0.conv1.\* | res3.0.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (128,) () (128,) (128,) (128,) (128,256,1,1) |

| res3.0.conv2.\* | res3.0.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (128,) () (128,) (128,) (128,) (128,128,3,3) |

| res3.0.conv3.\* | res3.0.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,128,1,1) |

| res3.0.shortcut.\* | res3.0.shortcut.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,256,1,1) |

| res3.1.conv1.\* | res3.1.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (128,) () (128,) (128,) (128,) (128,512,1,1) |

| res3.1.conv2.\* | res3.1.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (128,) () (128,) (128,) (128,) (128,128,3,3) |

| res3.1.conv3.\* | res3.1.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,128,1,1) |

| res3.2.conv1.\* | res3.2.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (128,) () (128,) (128,) (128,) (128,512,1,1) |

| res3.2.conv2.\* | res3.2.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (128,) () (128,) (128,) (128,) (128,128,3,3) |

| res3.2.conv3.\* | res3.2.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,128,1,1) |

| res3.3.conv1.\* | res3.3.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (128,) () (128,) (128,) (128,) (128,512,1,1) |

| res3.3.conv2.\* | res3.3.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (128,) () (128,) (128,) (128,) (128,128,3,3) |

| res3.3.conv3.\* | res3.3.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,128,1,1) |

| res4.0.conv1.\* | res4.0.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,512,1,1) |

| res4.0.conv2.\* | res4.0.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,256,3,3) |

| res4.0.conv3.\* | res4.0.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (1024,) () (1024,) (1024,) (1024,) (1024,256,1,1) |

| res4.0.shortcut.\* | res4.0.shortcut.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (1024,) () (1024,) (1024,) (1024,) (1024,512,1,1) |

| res4.1.conv1.\* | res4.1.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,1024,1,1) |

| res4.1.conv2.\* | res4.1.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,256,3,3) |

| res4.1.conv3.\* | res4.1.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (1024,) () (1024,) (1024,) (1024,) (1024,256,1,1) |

| res4.2.conv1.\* | res4.2.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,1024,1,1) |

| res4.2.conv2.\* | res4.2.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,256,3,3) |

| res4.2.conv3.\* | res4.2.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (1024,) () (1024,) (1024,) (1024,) (1024,256,1,1) |

| res4.3.conv1.\* | res4.3.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,1024,1,1) |

| res4.3.conv2.\* | res4.3.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,256,3,3) |

| res4.3.conv3.\* | res4.3.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (1024,) () (1024,) (1024,) (1024,) (1024,256,1,1) |

| res4.4.conv1.\* | res4.4.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,1024,1,1) |

| res4.4.conv2.\* | res4.4.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,256,3,3) |

| res4.4.conv3.\* | res4.4.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (1024,) () (1024,) (1024,) (1024,) (1024,256,1,1) |

| res4.5.conv1.\* | res4.5.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,1024,1,1) |

| res4.5.conv2.\* | res4.5.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (256,) () (256,) (256,) (256,) (256,256,3,3) |

| res4.5.conv3.\* | res4.5.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (1024,) () (1024,) (1024,) (1024,) (1024,256,1,1) |

| res5.0.conv1.\* | res5.0.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,1024,1,1) |

| res5.0.conv2.\* | res5.0.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,512,3,3) |

| res5.0.conv3.\* | res5.0.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (2048,) () (2048,) (2048,) (2048,) (2048,512,1,1) |

| res5.0.shortcut.\* | res5.0.shortcut.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (2048,) () (2048,) (2048,) (2048,) (2048,1024,1,1) |

| res5.1.conv1.\* | res5.1.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,2048,1,1) |

| res5.1.conv2.\* | res5.1.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,512,3,3) |

| res5.1.conv3.\* | res5.1.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (2048,) () (2048,) (2048,) (2048,) (2048,512,1,1) |

| res5.2.conv1.\* | res5.2.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,2048,1,1) |

| res5.2.conv2.\* | res5.2.conv2.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (512,) () (512,) (512,) (512,) (512,512,3,3) |

| res5.2.conv3.\* | res5.2.conv3.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (2048,) () (2048,) (2048,) (2048,) (2048,512,1,1) |

| stem.conv1.\* | stem.conv1.{norm.bias,norm.num\_batches\_tracked,norm.running\_mean,norm.running\_var,norm.weight,weight} | (64,) () (64,) (64,) (64,) (64,3,7,7) |

WARNING [05/26 12:25:58 fvcore.common.checkpoint]: Some model parameters or buffers are not found in the checkpoint:

backbone.fpn\_lateral2.norm.{bias, running\_mean, running\_var, weight}

backbone.fpn\_lateral2.weight

backbone.fpn\_lateral3.norm.{bias, running\_mean, running\_var, weight}

backbone.fpn\_lateral3.weight

backbone.fpn\_lateral4.norm.{bias, running\_mean, running\_var, weight}

backbone.fpn\_lateral4.weight

backbone.fpn\_lateral5.norm.{bias, running\_mean, running\_var, weight}

backbone.fpn\_lateral5.weight

backbone.fpn\_output2.norm.{bias, running\_mean, running\_var, weight}

backbone.fpn\_output2.weight

backbone.fpn\_output3.norm.{bias, running\_mean, running\_var, weight}

backbone.fpn\_output3.weight

backbone.fpn\_output4.norm.{bias, running\_mean, running\_var, weight}

backbone.fpn\_output4.weight

backbone.fpn\_output5.norm.{bias, running\_mean, running\_var, weight}

backbone.fpn\_output5.weight

proposal\_generator.rpn\_head.anchor\_deltas.{bias, weight}

proposal\_generator.rpn\_head.conv.{bias, weight}

proposal\_generator.rpn\_head.objectness\_logits.{bias, weight}

roi\_heads.box\_head.conv1.norm.{bias, running\_mean, running\_var, weight}

roi\_heads.box\_head.conv1.weight

roi\_heads.box\_head.conv2.norm.{bias, running\_mean, running\_var, weight}

roi\_heads.box\_head.conv2.weight

roi\_heads.box\_head.conv3.norm.{bias, running\_mean, running\_var, weight}

roi\_heads.box\_head.conv3.weight

roi\_heads.box\_head.conv4.norm.{bias, running\_mean, running\_var, weight}

roi\_heads.box\_head.conv4.weight

roi\_heads.box\_head.fc1.{bias, weight}

roi\_heads.box\_predictor.bbox\_pred.{bias, weight}

roi\_heads.box\_predictor.cls\_score.{bias, weight}

roi\_heads.mask\_head.deconv.{bias, weight}

roi\_heads.mask\_head.mask\_fcn1.norm.{bias, running\_mean, running\_var, weight}

roi\_heads.mask\_head.mask\_fcn1.weight

roi\_heads.mask\_head.mask\_fcn2.norm.{bias, running\_mean, running\_var, weight}

roi\_heads.mask\_head.mask\_fcn2.weight

roi\_heads.mask\_head.mask\_fcn3.norm.{bias, running\_mean, running\_var, weight}

roi\_heads.mask\_head.mask\_fcn3.weight

roi\_heads.mask\_head.mask\_fcn4.norm.{bias, running\_mean, running\_var, weight}

roi\_heads.mask\_head.mask\_fcn4.weight

roi\_heads.mask\_head.predictor.{bias, weight}

[default hooks] [ IterationTimer(\_warmup\_iter=3, \_step\_timer=<fvcore.common.timer.Timer object at 0x000001E9938BC7C0>, \_start\_time=51.4591171, \_total\_timer=<fvcore.common.timer.Timer object at 0x000001E99383D670>),

LRScheduler(\_optimizer=None, \_scheduler=None),

PreciseBN(\_logger=<Logger detectron2.engine.hooks (DEBUG)>, \_num\_iter=200, \_period=5000, \_disabled=False, \_data\_iter=None),

PeriodicCheckpointer(checkpointer=<detectron2.checkpoint.detection\_checkpoint.DetectionCheckpointer object at 0x000001E9938BF640>, period=5000, max\_iter=None, max\_to\_keep=None, recent\_checkpoints=[], path\_manager=<iopath.common.file\_io.PathManager object at 0x000001E98A436D60>, file\_prefix=model),

EvalHook(\_period=5000, \_func=<function DefaultTrainer.build\_hooks.<locals>.test\_and\_save\_results at 0x000001E993721160>, \_eval\_after\_train=True),

PeriodicWriter(\_writers=[CommonMetricPrinter(\_max\_iter=10, \_window\_size=20, \_last\_write=None), JSONWriter(\_file\_handle=<\_io.TextIOWrapper name='C:\\Users\\gpu\\SparK-main\\downstream\_d2\\output\\metrics.json' mode='a' encoding='cp1252'>, \_window\_size=20, \_last\_write=-1), TensorboardXWriter(\_window\_size=20, \_writer\_args={'log\_dir': 'C:\\Users\\gpu\\SparK-main\\downstream\_d2\\output'}, \_last\_write=-1)], \_period=1000)]

[extra hooks] [None, LogHook(eval\_period=5000, log\_period=1250, log={}, is\_master=True, is\_local\_master=True, config\_file=./configs/coco\_R\_50\_FPN\_CONV\_1x\_moco\_adam.yaml, out\_dir=C:\Users\gpu\SparK-main\downstream\_d2\output, log\_txt\_name=C:\Users\gpu\SparK-main\downstream\_d2\output\d2\_coco\_log.txt)]

[05/26 12:25:58 d2.engine.train\_loop]: Starting training from iteration 0

An exception occurred in telemetry logging.Disabling telemetry to prevent further exceptions.

Traceback (most recent call last):

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\iopath\common\file\_io.py", line 946, in \_\_log\_tmetry\_keys

handler.log\_event()

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\iopath\common\event\_logger.py", line 97, in log\_event

del self.\_evt

AttributeError: \_evt

An exception occurred in telemetry logging.Disabling telemetry to prevent further exceptions.

Traceback (most recent call last):

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\iopath\common\file\_io.py", line 946, in \_\_log\_tmetry\_keys

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AttributeError: \_evt

An exception occurred in telemetry logging.Disabling telemetry to prevent further exceptions.

Traceback (most recent call last):

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\iopath\common\file\_io.py", line 946, in \_\_log\_tmetry\_keys

handler.log\_event()

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\iopath\common\event\_logger.py", line 97, in log\_event

del self.\_evt

AttributeError: \_evt

ERROR [05/26 12:26:53 d2.engine.train\_loop]: Exception during training:

Traceback (most recent call last):

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\train\_loop.py", line 155, in train

self.run\_step()

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\defaults.py", line 494, in run\_step

self.\_trainer.run\_step()

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\train\_loop.py", line 310, in run\_step

loss\_dict = self.model(data)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\modeling\meta\_arch\rcnn.py", line 158, in forward

features = self.backbone(images.tensor)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\modeling\backbone\fpn.py", line 139, in forward

bottom\_up\_features = self.bottom\_up(x)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\modeling\backbone\resnet.py", line 449, in forward

x = stage(x)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\container.py", line 217, in forward

input = module(input)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\modeling\backbone\resnet.py", line 201, in forward

out = self.conv3(out)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\layers\wrappers.py", line 131, in forward

x = self.norm(x)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\batchnorm.py", line 741, in forward

return F.batch\_norm(

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\functional.py", line 2450, in batch\_norm

return torch.batch\_norm(

torch.cuda.OutOfMemoryError: CUDA out of memory. Tried to allocate 1.15 GiB (GPU 0; 8.00 GiB total capacity; 5.84 GiB already allocated; 0 bytes free; 6.87 GiB reserved in total by PyTorch) If reserved memory is >> allocated memory try setting max\_split\_size\_mb to avoid fragmentation. See documentation for Memory Management and PYTORCH\_CUDA\_ALLOC\_CONF

[05/26 12:26:53 d2.engine.hooks]: Total training time: 0:00:54 (0:00:00 on hooks)

[05/26 12:26:53 d2.utils.events]: iter: 0 lr: N/A max\_mem: 5985M

Traceback (most recent call last):

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\train\_loop.py", line 155, in train

self.run\_step()

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\defaults.py", line 494, in run\_step

self.\_trainer.run\_step()

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\train\_loop.py", line 310, in run\_step

loss\_dict = self.model(data)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\modeling\meta\_arch\rcnn.py", line 158, in forward

features = self.backbone(images.tensor)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\modeling\backbone\fpn.py", line 139, in forward

bottom\_up\_features = self.bottom\_up(x)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\modeling\backbone\resnet.py", line 449, in forward

x = stage(x)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\container.py", line 217, in forward

input = module(input)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\modeling\backbone\resnet.py", line 201, in forward

out = self.conv3(out)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\layers\wrappers.py", line 131, in forward

x = self.norm(x)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\module.py", line 1501, in \_call\_impl

return forward\_call(\*args, \*\*kwargs)

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\modules\batchnorm.py", line 741, in forward

return F.batch\_norm(

File "C:\Users\gpu\.conda\envs\spark\lib\site-packages\torch\nn\functional.py", line 2450, in batch\_norm

return torch.batch\_norm(

torch.cuda.OutOfMemoryError: CUDA out of memory. Tried to allocate 1.15 GiB (GPU 0; 8.00 GiB total capacity; 5.84 GiB already allocated; 0 bytes free; 6.87 GiB reserved in total by PyTorch) If reserved memory is >> allocated memory try setting max\_split\_size\_mb to avoid fragmentation. See documentation for Memory Management and PYTORCH\_CUDA\_ALLOC\_CONF

During handling of the above exception, another exception occurred:

Traceback (most recent call last):

File "./train\_net.py", line 277, in <module>

launch(

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\launch.py", line 84, in launch

main\_func(\*args)

File "./train\_net.py", line 207, in main

return trainer.train()

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\defaults.py", line 484, in train

super().train(self.start\_iter, self.max\_iter)

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\train\_loop.py", line 165, in train

self.after\_train()

File "C:\Users\gpu\SparK-main\downstream\_d2\detectron2\engine\train\_loop.py", line 174, in after\_train

h.after\_train()

File "./train\_net.py", line 262, in after\_train

self.update\_and\_write\_to\_local\_log()

File "./train\_net.py", line 233, in update\_and\_write\_to\_local\_log

self.log['boxAP'], self.log['bAP50'], self.log['bAP75'] = stat['bbox/AP'][0], stat['bbox/AP50'][0], stat['bbox/AP75'][0]

KeyError: 'bbox/AP'

(spark) C:\Users\gpu\SparK-main\downstream\_d2>