Using provided s3\_resource

INFO:sagemaker:Creating training-job with name: tf2-object-detection-2023-08-18-19-27-50-557

2023-08-18 19:27:52 Starting - Starting the training job...

2023-08-18 19:28:07 Starting - Preparing the instances for training......

2023-08-18 19:29:09 Downloading - Downloading input data...

2023-08-18 19:29:34 Training - Downloading the training image.........

2023-08-18 19:31:10 Training - Training image download completed. Training in progress...2023-08-18 19:31:36,782 sagemaker-training-toolkit INFO No GPUs detected (normal if no gpus installed)

2023-08-18 19:31:36,784 sagemaker-training-toolkit INFO No Neurons detected (normal if no neurons installed)

2023-08-18 19:31:36,798 sagemaker-training-toolkit INFO No GPUs detected (normal if no gpus installed)

2023-08-18 19:31:36,800 sagemaker-training-toolkit INFO No Neurons detected (normal if no neurons installed)

2023-08-18 19:31:36,814 sagemaker-training-toolkit INFO No GPUs detected (normal if no gpus installed)

2023-08-18 19:31:36,816 sagemaker-training-toolkit INFO No Neurons detected (normal if no neurons installed)

2023-08-18 19:31:36,828 sagemaker-training-toolkit INFO Invoking user script

Training Env:

{

"additional\_framework\_parameters": {},

"channel\_input\_dirs": {

"train": "/opt/ml/input/data/train",

"val": "/opt/ml/input/data/val"

},

"current\_host": "algo-1",

"current\_instance\_group": "homogeneousCluster",

"current\_instance\_group\_hosts": [

"algo-1"

],

"current\_instance\_type": "ml.m5.2xlarge",

"distribution\_hosts": [],

"distribution\_instance\_groups": [],

"framework\_module": null,

"hosts": [

"algo-1"

],

"hyperparameters": {

"model\_dir": "/opt/training",

"num\_train\_steps": "2000",

"pipeline\_config\_path": "pipeline.config",

"sample\_1\_of\_n\_eval\_examples": "1"

},

"input\_config\_dir": "/opt/ml/input/config",

"input\_data\_config": {

"train": {

"TrainingInputMode": "File",

"S3DistributionType": "FullyReplicated",

"RecordWrapperType": "None"

},

"val": {

"TrainingInputMode": "File",

"S3DistributionType": "FullyReplicated",

"RecordWrapperType": "None"

}

},

"input\_dir": "/opt/ml/input",

"instance\_groups": [

"homogeneousCluster"

],

"instance\_groups\_dict": {

"homogeneousCluster": {

"instance\_group\_name": "homogeneousCluster",

"instance\_type": "ml.m5.2xlarge",

"hosts": [

"algo-1"

]

}

},

"is\_hetero": false,

"is\_master": true,

"is\_modelparallel\_enabled": null,

"is\_smddpmprun\_installed": false,

"job\_name": "tf2-object-detection-2023-08-18-19-27-50-557",

"log\_level": 20,

"master\_hostname": "algo-1",

"model\_dir": "/opt/ml/model",

"module\_dir": "s3://sagemaker-us-east-1-789453636658/tf2-object-detection-2023-08-18-19-27-50-557/source/sourcedir.tar.gz",

"module\_name": "run\_training.sh",

"network\_interface\_name": "eth0",

"num\_cpus": 8,

"num\_gpus": 0,

"num\_neurons": 0,

"output\_data\_dir": "/opt/ml/output/data",

"output\_dir": "/opt/ml/output",

"output\_intermediate\_dir": "/opt/ml/output/intermediate",

"resource\_config": {

"current\_host": "algo-1",

"current\_instance\_type": "ml.m5.2xlarge",

"current\_group\_name": "homogeneousCluster",

"hosts": [

"algo-1"

],

"instance\_groups": [

{

"instance\_group\_name": "homogeneousCluster",

"instance\_type": "ml.m5.2xlarge",

"hosts": [

"algo-1"

]

}

],

"network\_interface\_name": "eth0"

},

"user\_entry\_point": "run\_training.sh"

}

Environment variables:

SM\_HOSTS=["algo-1"]

SM\_NETWORK\_INTERFACE\_NAME=eth0

SM\_HPS={"model\_dir":"/opt/training","num\_train\_steps":"2000","pipeline\_config\_path":"pipeline.config","sample\_1\_of\_n\_eval\_examples":"1"}

SM\_USER\_ENTRY\_POINT=run\_training.sh

SM\_FRAMEWORK\_PARAMS={}

SM\_RESOURCE\_CONFIG={"current\_group\_name":"homogeneousCluster","current\_host":"algo-1","current\_instance\_type":"ml.m5.2xlarge","hosts":["algo-1"],"instance\_groups":[{"hosts":["algo-1"],"instance\_group\_name":"homogeneousCluster","instance\_type":"ml.m5.2xlarge"}],"network\_interface\_name":"eth0"}

SM\_INPUT\_DATA\_CONFIG={"train":{"RecordWrapperType":"None","S3DistributionType":"FullyReplicated","TrainingInputMode":"File"},"val":{"RecordWrapperType":"None","S3DistributionType":"FullyReplicated","TrainingInputMode":"File"}}

SM\_OUTPUT\_DATA\_DIR=/opt/ml/output/data

SM\_CHANNELS=["train","val"]

SM\_CURRENT\_HOST=algo-1

SM\_CURRENT\_INSTANCE\_TYPE=ml.m5.2xlarge

SM\_CURRENT\_INSTANCE\_GROUP=homogeneousCluster

SM\_CURRENT\_INSTANCE\_GROUP\_HOSTS=["algo-1"]

SM\_INSTANCE\_GROUPS=["homogeneousCluster"]

SM\_INSTANCE\_GROUPS\_DICT={"homogeneousCluster":{"hosts":["algo-1"],"instance\_group\_name":"homogeneousCluster","instance\_type":"ml.m5.2xlarge"}}

SM\_DISTRIBUTION\_INSTANCE\_GROUPS=[]

SM\_IS\_HETERO=false

SM\_MODULE\_NAME=run\_training.sh

SM\_LOG\_LEVEL=20

SM\_FRAMEWORK\_MODULE=

SM\_INPUT\_DIR=/opt/ml/input

SM\_INPUT\_CONFIG\_DIR=/opt/ml/input/config

SM\_OUTPUT\_DIR=/opt/ml/output

SM\_NUM\_CPUS=8

SM\_NUM\_GPUS=0

SM\_NUM\_NEURONS=0

SM\_MODEL\_DIR=/opt/ml/model

SM\_MODULE\_DIR=s3://sagemaker-us-east-1-789453636658/tf2-object-detection-2023-08-18-19-27-50-557/source/sourcedir.tar.gz

SM\_TRAINING\_ENV={"additional\_framework\_parameters":{},"channel\_input\_dirs":{"train":"/opt/ml/input/data/train","val":"/opt/ml/input/data/val"},"current\_host":"algo-1","current\_instance\_group":"homogeneousCluster","current\_instance\_group\_hosts":["algo-1"],"current\_instance\_type":"ml.m5.2xlarge","distribution\_hosts":[],"distribution\_instance\_groups":[],"framework\_module":null,"hosts":["algo-1"],"hyperparameters":{"model\_dir":"/opt/training","num\_train\_steps":"2000","pipeline\_config\_path":"pipeline.config","sample\_1\_of\_n\_eval\_examples":"1"},"input\_config\_dir":"/opt/ml/input/config","input\_data\_config":{"train":{"RecordWrapperType":"None","S3DistributionType":"FullyReplicated","TrainingInputMode":"File"},"val":{"RecordWrapperType":"None","S3DistributionType":"FullyReplicated","TrainingInputMode":"File"}},"input\_dir":"/opt/ml/input","instance\_groups":["homogeneousCluster"],"instance\_groups\_dict":{"homogeneousCluster":{"hosts":["algo-1"],"instance\_group\_name":"homogeneousCluster","instance\_type":"ml.m5.2xlarge"}},"is\_hetero":false,"is\_master":true,"is\_modelparallel\_enabled":null,"is\_smddpmprun\_installed":false,"job\_name":"tf2-object-detection-2023-08-18-19-27-50-557","log\_level":20,"master\_hostname":"algo-1","model\_dir":"/opt/ml/model","module\_dir":"s3://sagemaker-us-east-1-789453636658/tf2-object-detection-2023-08-18-19-27-50-557/source/sourcedir.tar.gz","module\_name":"run\_training.sh","network\_interface\_name":"eth0","num\_cpus":8,"num\_gpus":0,"num\_neurons":0,"output\_data\_dir":"/opt/ml/output/data","output\_dir":"/opt/ml/output","output\_intermediate\_dir":"/opt/ml/output/intermediate","resource\_config":{"current\_group\_name":"homogeneousCluster","current\_host":"algo-1","current\_instance\_type":"ml.m5.2xlarge","hosts":["algo-1"],"instance\_groups":[{"hosts":["algo-1"],"instance\_group\_name":"homogeneousCluster","instance\_type":"ml.m5.2xlarge"}],"network\_interface\_name":"eth0"},"user\_entry\_point":"run\_training.sh"}

SM\_USER\_ARGS=["--model\_dir","/opt/training","--num\_train\_steps","2000","--pipeline\_config\_path","pipeline.config","--sample\_1\_of\_n\_eval\_examples","1"]

SM\_OUTPUT\_INTERMEDIATE\_DIR=/opt/ml/output/intermediate

SM\_CHANNEL\_TRAIN=/opt/ml/input/data/train

SM\_CHANNEL\_VAL=/opt/ml/input/data/val

SM\_HP\_MODEL\_DIR=/opt/training

SM\_HP\_NUM\_TRAIN\_STEPS=2000

SM\_HP\_PIPELINE\_CONFIG\_PATH=pipeline.config

SM\_HP\_SAMPLE\_1\_OF\_N\_EVAL\_EXAMPLES=1

PYTHONPATH=/opt/ml/code:/usr/local/bin:/usr/lib/python38.zip:/usr/lib/python3.8:/usr/lib/python3.8/lib-dynload:/usr/local/lib/python3.8/dist-packages:/usr/lib/python3/dist-packages

Invoking script with the following command:

/bin/sh -c "./run\_training.sh --model\_dir /opt/training --num\_train\_steps 2000 --pipeline\_config\_path pipeline.config --sample\_1\_of\_n\_eval\_examples 1"

2023-08-18 19:31:36,829 sagemaker-training-toolkit INFO Exceptions not imported for SageMaker Debugger as it is not installed.

===TRAINING THE MODEL==

INFO:tensorflow:Using MirroredStrategy with devices ('/job:localhost/replica:0/task:0/device:CPU:0',)

I0818 19:31:42.876619 140349932992320 mirrored\_strategy.py:419] Using MirroredStrategy with devices ('/job:localhost/replica:0/task:0/device:CPU:0',)

INFO:tensorflow:Maybe overwriting train\_steps: 2000

I0818 19:31:42.899416 140349932992320 config\_util.py:552] Maybe overwriting train\_steps: 2000

INFO:tensorflow:Maybe overwriting use\_bfloat16: False

I0818 19:31:42.899588 140349932992320 config\_util.py:552] Maybe overwriting use\_bfloat16: False

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/object\_detection/model\_lib\_v2.py:563: StrategyBase.experimental\_distribute\_datasets\_from\_function (from tensorflow.python.distribute.distribute\_lib) is deprecated and will be removed in a future version.

Instructions for updating:

rename to distribute\_datasets\_from\_function

W0818 19:31:42.924484 140349932992320 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/object\_detection/model\_lib\_v2.py:563: StrategyBase.experimental\_distribute\_datasets\_from\_function (from tensorflow.python.distribute.distribute\_lib) is deprecated and will be removed in a future version.

Instructions for updating:

rename to distribute\_datasets\_from\_function

INFO:tensorflow:Reading unweighted datasets: ['/opt/ml/input/data/train/\*.tfrecord']

I0818 19:31:42.931410 140349932992320 dataset\_builder.py:162] Reading unweighted datasets: ['/opt/ml/input/data/train/\*.tfrecord']

INFO:tensorflow:Reading record datasets for input file: ['/opt/ml/input/data/train/\*.tfrecord']

I0818 19:31:42.932803 140349932992320 dataset\_builder.py:79] Reading record datasets for input file: ['/opt/ml/input/data/train/\*.tfrecord']

INFO:tensorflow:Number of filenames to read: 84

I0818 19:31:42.932929 140349932992320 dataset\_builder.py:80] Number of filenames to read: 84

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/object\_detection/builders/dataset\_builder.py:100: parallel\_interleave (from tensorflow.python.data.experimental.ops.interleave\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.data.Dataset.interleave(map\_func, cycle\_length, block\_length, num\_parallel\_calls=tf.data.AUTOTUNE)` instead. If sloppy execution is desired, use `tf.data.Options.deterministic`.

W0818 19:31:42.939682 140349932992320 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/object\_detection/builders/dataset\_builder.py:100: parallel\_interleave (from tensorflow.python.data.experimental.ops.interleave\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.data.Dataset.interleave(map\_func, cycle\_length, block\_length, num\_parallel\_calls=tf.data.AUTOTUNE)` instead. If sloppy execution is desired, use `tf.data.Options.deterministic`.

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/object\_detection/builders/dataset\_builder.py:235: DatasetV1.map\_with\_legacy\_function (from tensorflow.python.data.ops.dataset\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.data.Dataset.map()

W0818 19:31:42.959542 140349932992320 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/object\_detection/builders/dataset\_builder.py:235: DatasetV1.map\_with\_legacy\_function (from tensorflow.python.data.ops.dataset\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.data.Dataset.map()

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: sparse\_to\_dense (from tensorflow.python.ops.sparse\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Create a `tf.sparse.SparseTensor` and use `tf.sparse.to\_dense` instead.

W0818 19:31:49.135405 140349932992320 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: sparse\_to\_dense (from tensorflow.python.ops.sparse\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Create a `tf.sparse.SparseTensor` and use `tf.sparse.to\_dense` instead.

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: sample\_distorted\_bounding\_box (from tensorflow.python.ops.image\_ops\_impl) is deprecated and will be removed in a future version.

Instructions for updating:

`seed2` arg is deprecated.Use sample\_distorted\_bounding\_box\_v2 instead.

W0818 19:31:51.697597 140349932992320 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: sample\_distorted\_bounding\_box (from tensorflow.python.ops.image\_ops\_impl) is deprecated and will be removed in a future version.

Instructions for updating:

`seed2` arg is deprecated.Use sample\_distorted\_bounding\_box\_v2 instead.

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: to\_float (from tensorflow.python.ops.math\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.cast` instead.

W0818 19:31:53.017689 140349932992320 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: to\_float (from tensorflow.python.ops.math\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.cast` instead.

/usr/local/lib/python3.8/dist-packages/keras/src/backend.py:452: UserWarning: `tf.keras.backend.set\_learning\_phase` is deprecated and will be removed after 2020-10-11. To update it, simply pass a True/False value to the `training` argument of the `\_\_call\_\_` method of your layer or model.

warnings.warn(

I0818 19:32:00.311843 140345304151808 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

I0818 19:32:08.542331 140345304151808 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/deprecation.py:648: calling map\_fn\_v2 (from tensorflow.python.ops.map\_fn) with dtype is deprecated and will be removed in a future version.

Instructions for updating:

Use fn\_output\_signature instead

W0818 19:32:15.576361 140345675335424 deprecation.py:569] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/deprecation.py:648: calling map\_fn\_v2 (from tensorflow.python.ops.map\_fn) with dtype is deprecated and will be removed in a future version.

Instructions for updating:

Use fn\_output\_signature instead

I0818 19:32:16.846425 140345675335424 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

I0818 19:32:23.190977 140345675335424 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

I0818 19:32:28.987219 140345675335424 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

I0818 19:32:34.933585 140345675335424 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

INFO:tensorflow:Step 100 per-step time 3.647s

I0818 19:38:19.946887 140349932992320 model\_lib\_v2.py:705] Step 100 per-step time 3.647s

INFO:tensorflow:{'Loss/classification\_loss': 0.534877,

'Loss/localization\_loss': 0.5518487,

'Loss/regularization\_loss': 0.14310135,

'Loss/total\_loss': 1.229827,

'learning\_rate': 0.004}

I0818 19:38:19.947229 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.534877,

'Loss/localization\_loss': 0.5518487,

'Loss/regularization\_loss': 0.14310135,

'Loss/total\_loss': 1.229827,

'learning\_rate': 0.004}

INFO:tensorflow:Step 200 per-step time 3.320s

I0818 19:43:51.921965 140349932992320 model\_lib\_v2.py:705] Step 200 per-step time 3.320s

INFO:tensorflow:{'Loss/classification\_loss': 0.43705904,

'Loss/localization\_loss': 0.51569265,

'Loss/regularization\_loss': 0.12530816,

'Loss/total\_loss': 1.0780599,

'learning\_rate': 0.004}

I0818 19:43:51.922238 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.43705904,

'Loss/localization\_loss': 0.51569265,

'Loss/regularization\_loss': 0.12530816,

'Loss/total\_loss': 1.0780599,

'learning\_rate': 0.004}

INFO:tensorflow:Step 300 per-step time 3.303s

I0818 19:49:22.174231 140349932992320 model\_lib\_v2.py:705] Step 300 per-step time 3.303s

INFO:tensorflow:{'Loss/classification\_loss': 0.41568053,

'Loss/localization\_loss': 0.41608602,

'Loss/regularization\_loss': 0.11611957,

'Loss/total\_loss': 0.9478861,

'learning\_rate': 0.004}

I0818 19:49:22.174499 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.41568053,

'Loss/localization\_loss': 0.41608602,

'Loss/regularization\_loss': 0.11611957,

'Loss/total\_loss': 0.9478861,

'learning\_rate': 0.004}

INFO:tensorflow:Step 400 per-step time 3.293s

I0818 19:54:51.435985 140349932992320 model\_lib\_v2.py:705] Step 400 per-step time 3.293s

INFO:tensorflow:{'Loss/classification\_loss': 0.35744148,

'Loss/localization\_loss': 0.34339562,

'Loss/regularization\_loss': 0.11045256,

'Loss/total\_loss': 0.81128967,

'learning\_rate': 0.004}

I0818 19:54:51.436280 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.35744148,

'Loss/localization\_loss': 0.34339562,

'Loss/regularization\_loss': 0.11045256,

'Loss/total\_loss': 0.81128967,

'learning\_rate': 0.004}

INFO:tensorflow:Step 500 per-step time 3.307s

I0818 20:00:22.127896 140349932992320 model\_lib\_v2.py:705] Step 500 per-step time 3.307s

INFO:tensorflow:{'Loss/classification\_loss': 0.3332971,

'Loss/localization\_loss': 0.3635792,

'Loss/regularization\_loss': 0.10774818,

'Loss/total\_loss': 0.80462444,

'learning\_rate': 0.004}

I0818 20:00:22.128170 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.3332971,

'Loss/localization\_loss': 0.3635792,

'Loss/regularization\_loss': 0.10774818,

'Loss/total\_loss': 0.80462444,

'learning\_rate': 0.004}

INFO:tensorflow:Step 600 per-step time 3.319s

I0818 20:05:54.054872 140349932992320 model\_lib\_v2.py:705] Step 600 per-step time 3.319s

INFO:tensorflow:{'Loss/classification\_loss': 0.35232142,

'Loss/localization\_loss': 0.35690945,

'Loss/regularization\_loss': 0.10581672,

'Loss/total\_loss': 0.8150476,

'learning\_rate': 0.004}

I0818 20:05:54.055186 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.35232142,

'Loss/localization\_loss': 0.35690945,

'Loss/regularization\_loss': 0.10581672,

'Loss/total\_loss': 0.8150476,

'learning\_rate': 0.004}

INFO:tensorflow:Step 700 per-step time 3.309s

I0818 20:11:24.959820 140349932992320 model\_lib\_v2.py:705] Step 700 per-step time 3.309s

INFO:tensorflow:{'Loss/classification\_loss': 0.3628205,

'Loss/localization\_loss': 0.39836946,

'Loss/regularization\_loss': 0.10580079,

'Loss/total\_loss': 0.8669908,

'learning\_rate': 0.004}

I0818 20:11:24.960089 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.3628205,

'Loss/localization\_loss': 0.39836946,

'Loss/regularization\_loss': 0.10580079,

'Loss/total\_loss': 0.8669908,

'learning\_rate': 0.004}

INFO:tensorflow:Step 800 per-step time 3.310s

I0818 20:16:55.956422 140349932992320 model\_lib\_v2.py:705] Step 800 per-step time 3.310s

INFO:tensorflow:{'Loss/classification\_loss': 0.32154256,

'Loss/localization\_loss': 0.30628163,

'Loss/regularization\_loss': 0.10308775,

'Loss/total\_loss': 0.73091197,

'learning\_rate': 0.004}

I0818 20:16:55.956725 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.32154256,

'Loss/localization\_loss': 0.30628163,

'Loss/regularization\_loss': 0.10308775,

'Loss/total\_loss': 0.73091197,

'learning\_rate': 0.004}

INFO:tensorflow:Step 900 per-step time 3.329s

I0818 20:22:28.889405 140349932992320 model\_lib\_v2.py:705] Step 900 per-step time 3.329s

INFO:tensorflow:{'Loss/classification\_loss': 0.3052675,

'Loss/localization\_loss': 0.33299667,

'Loss/regularization\_loss': 0.10717963,

'Loss/total\_loss': 0.7454438,

'learning\_rate': 0.004}

I0818 20:22:28.889658 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.3052675,

'Loss/localization\_loss': 0.33299667,

'Loss/regularization\_loss': 0.10717963,

'Loss/total\_loss': 0.7454438,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1000 per-step time 3.322s

I0818 20:28:01.096541 140349932992320 model\_lib\_v2.py:705] Step 1000 per-step time 3.322s

INFO:tensorflow:{'Loss/classification\_loss': 0.3023074,

'Loss/localization\_loss': 0.31031534,

'Loss/regularization\_loss': 0.10114368,

'Loss/total\_loss': 0.7137664,

'learning\_rate': 0.004}

I0818 20:28:01.096812 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.3023074,

'Loss/localization\_loss': 0.31031534,

'Loss/regularization\_loss': 0.10114368,

'Loss/total\_loss': 0.7137664,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1100 per-step time 3.324s

I0818 20:33:33.544904 140349932992320 model\_lib\_v2.py:705] Step 1100 per-step time 3.324s

INFO:tensorflow:{'Loss/classification\_loss': 0.2667329,

'Loss/localization\_loss': 0.29710186,

'Loss/regularization\_loss': 0.10321413,

'Loss/total\_loss': 0.66704893,

'learning\_rate': 0.004}

I0818 20:33:33.545191 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.2667329,

'Loss/localization\_loss': 0.29710186,

'Loss/regularization\_loss': 0.10321413,

'Loss/total\_loss': 0.66704893,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1200 per-step time 3.320s

I0818 20:39:05.537658 140349932992320 model\_lib\_v2.py:705] Step 1200 per-step time 3.320s

INFO:tensorflow:{'Loss/classification\_loss': 0.29782438,

'Loss/localization\_loss': 0.29293388,

'Loss/regularization\_loss': 0.10540987,

'Loss/total\_loss': 0.6961681,

'learning\_rate': 0.004}

I0818 20:39:05.537933 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.29782438,

'Loss/localization\_loss': 0.29293388,

'Loss/regularization\_loss': 0.10540987,

'Loss/total\_loss': 0.6961681,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1300 per-step time 3.323s

I0818 20:44:37.862917 140349932992320 model\_lib\_v2.py:705] Step 1300 per-step time 3.323s

INFO:tensorflow:{'Loss/classification\_loss': 0.28318924,

'Loss/localization\_loss': 0.32544258,

'Loss/regularization\_loss': 0.10318742,

'Loss/total\_loss': 0.71181923,

'learning\_rate': 0.004}

I0818 20:44:37.863184 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.28318924,

'Loss/localization\_loss': 0.32544258,

'Loss/regularization\_loss': 0.10318742,

'Loss/total\_loss': 0.71181923,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1400 per-step time 3.314s

I0818 20:50:09.310339 140349932992320 model\_lib\_v2.py:705] Step 1400 per-step time 3.314s

INFO:tensorflow:{'Loss/classification\_loss': 0.33042207,

'Loss/localization\_loss': 0.36244705,

'Loss/regularization\_loss': 0.102549575,

'Loss/total\_loss': 0.7954187,

'learning\_rate': 0.004}

I0818 20:50:09.310612 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.33042207,

'Loss/localization\_loss': 0.36244705,

'Loss/regularization\_loss': 0.102549575,

'Loss/total\_loss': 0.7954187,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1500 per-step time 3.320s

I0818 20:55:41.267461 140349932992320 model\_lib\_v2.py:705] Step 1500 per-step time 3.320s

INFO:tensorflow:{'Loss/classification\_loss': 0.32354805,

'Loss/localization\_loss': 0.29539526,

'Loss/regularization\_loss': 0.102197126,

'Loss/total\_loss': 0.72114044,

'learning\_rate': 0.004}

I0818 20:55:41.267728 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.32354805,

'Loss/localization\_loss': 0.29539526,

'Loss/regularization\_loss': 0.102197126,

'Loss/total\_loss': 0.72114044,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1600 per-step time 3.324s

I0818 21:01:13.689249 140349932992320 model\_lib\_v2.py:705] Step 1600 per-step time 3.324s

INFO:tensorflow:{'Loss/classification\_loss': 0.3043723,

'Loss/localization\_loss': 0.33449095,

'Loss/regularization\_loss': 0.10215101,

'Loss/total\_loss': 0.74101424,

'learning\_rate': 0.004}

I0818 21:01:13.689541 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.3043723,

'Loss/localization\_loss': 0.33449095,

'Loss/regularization\_loss': 0.10215101,

'Loss/total\_loss': 0.74101424,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1700 per-step time 3.323s

I0818 21:06:46.032000 140349932992320 model\_lib\_v2.py:705] Step 1700 per-step time 3.323s

INFO:tensorflow:{'Loss/classification\_loss': 0.31164846,

'Loss/localization\_loss': 0.32135108,

'Loss/regularization\_loss': 0.10078069,

'Loss/total\_loss': 0.7337802,

'learning\_rate': 0.004}

I0818 21:06:46.032265 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.31164846,

'Loss/localization\_loss': 0.32135108,

'Loss/regularization\_loss': 0.10078069,

'Loss/total\_loss': 0.7337802,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1800 per-step time 3.319s

I0818 21:12:17.884817 140349932992320 model\_lib\_v2.py:705] Step 1800 per-step time 3.319s

INFO:tensorflow:{'Loss/classification\_loss': 0.29220673,

'Loss/localization\_loss': 0.36051515,

'Loss/regularization\_loss': 0.09961446,

'Loss/total\_loss': 0.7523363,

'learning\_rate': 0.004}

I0818 21:12:17.885094 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.29220673,

'Loss/localization\_loss': 0.36051515,

'Loss/regularization\_loss': 0.09961446,

'Loss/total\_loss': 0.7523363,

'learning\_rate': 0.004}

INFO:tensorflow:Step 1900 per-step time 3.309s

I0818 21:17:48.827037 140349932992320 model\_lib\_v2.py:705] Step 1900 per-step time 3.309s

INFO:tensorflow:{'Loss/classification\_loss': 0.29964057,

'Loss/localization\_loss': 0.30633965,

'Loss/regularization\_loss': 0.1002393,

'Loss/total\_loss': 0.7062195,

'learning\_rate': 0.004}

I0818 21:17:48.827296 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.29964057,

'Loss/localization\_loss': 0.30633965,

'Loss/regularization\_loss': 0.1002393,

'Loss/total\_loss': 0.7062195,

'learning\_rate': 0.004}

INFO:tensorflow:Step 2000 per-step time 3.302s

I0818 21:23:19.047202 140349932992320 model\_lib\_v2.py:705] Step 2000 per-step time 3.302s

INFO:tensorflow:{'Loss/classification\_loss': 0.30862662,

'Loss/localization\_loss': 0.32811287,

'Loss/regularization\_loss': 0.101862155,

'Loss/total\_loss': 0.7386016,

'learning\_rate': 0.004}

I0818 21:23:19.047470 140349932992320 model\_lib\_v2.py:708] {'Loss/classification\_loss': 0.30862662,

'Loss/localization\_loss': 0.32811287,

'Loss/regularization\_loss': 0.101862155,

'Loss/total\_loss': 0.7386016,

'learning\_rate': 0.004}

==EVALUATING THE MODEL==

WARNING:tensorflow:Forced number of epochs for all eval validations to be 1.

W0818 21:24:13.758143 140450831300416 model\_lib\_v2.py:1089] Forced number of epochs for all eval validations to be 1.

INFO:tensorflow:Maybe overwriting sample\_1\_of\_n\_eval\_examples: None

I0818 21:24:13.758326 140450831300416 config\_util.py:552] Maybe overwriting sample\_1\_of\_n\_eval\_examples: None

INFO:tensorflow:Maybe overwriting use\_bfloat16: False

I0818 21:24:13.758406 140450831300416 config\_util.py:552] Maybe overwriting use\_bfloat16: False

INFO:tensorflow:Maybe overwriting eval\_num\_epochs: 1

I0818 21:24:13.758479 140450831300416 config\_util.py:552] Maybe overwriting eval\_num\_epochs: 1

WARNING:tensorflow:Expected number of evaluation epochs is 1, but instead encountered `eval\_on\_train\_input\_config.num\_epochs` = 0. Overwriting `num\_epochs` to 1.

W0818 21:24:13.758582 140450831300416 model\_lib\_v2.py:1106] Expected number of evaluation epochs is 1, but instead encountered `eval\_on\_train\_input\_config.num\_epochs` = 0. Overwriting `num\_epochs` to 1.

INFO:tensorflow:Reading unweighted datasets: ['/opt/ml/input/data/train/\*.tfrecord']

I0818 21:24:13.809048 140450831300416 dataset\_builder.py:162] Reading unweighted datasets: ['/opt/ml/input/data/train/\*.tfrecord']

INFO:tensorflow:Reading record datasets for input file: ['/opt/ml/input/data/train/\*.tfrecord']

I0818 21:24:13.810423 140450831300416 dataset\_builder.py:79] Reading record datasets for input file: ['/opt/ml/input/data/train/\*.tfrecord']

INFO:tensorflow:Number of filenames to read: 84

I0818 21:24:13.810570 140450831300416 dataset\_builder.py:80] Number of filenames to read: 84

WARNING:tensorflow:`shuffle` is false, but the input data stream is still slightly shuffled since `num\_readers` > 1.

W0818 21:24:13.812792 140450831300416 dataset\_builder.py:93] `shuffle` is false, but the input data stream is still slightly shuffled since `num\_readers` > 1.

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/object\_detection/builders/dataset\_builder.py:100: parallel\_interleave (from tensorflow.python.data.experimental.ops.interleave\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.data.Dataset.interleave(map\_func, cycle\_length, block\_length, num\_parallel\_calls=tf.data.AUTOTUNE)` instead. If sloppy execution is desired, use `tf.data.Options.deterministic`.

W0818 21:24:13.814241 140450831300416 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/object\_detection/builders/dataset\_builder.py:100: parallel\_interleave (from tensorflow.python.data.experimental.ops.interleave\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.data.Dataset.interleave(map\_func, cycle\_length, block\_length, num\_parallel\_calls=tf.data.AUTOTUNE)` instead. If sloppy execution is desired, use `tf.data.Options.deterministic`.

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/object\_detection/builders/dataset\_builder.py:235: DatasetV1.map\_with\_legacy\_function (from tensorflow.python.data.ops.dataset\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.data.Dataset.map()

W0818 21:24:13.834172 140450831300416 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/object\_detection/builders/dataset\_builder.py:235: DatasetV1.map\_with\_legacy\_function (from tensorflow.python.data.ops.dataset\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.data.Dataset.map()

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: sparse\_to\_dense (from tensorflow.python.ops.sparse\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Create a `tf.sparse.SparseTensor` and use `tf.sparse.to\_dense` instead.

W0818 21:24:17.357652 140450831300416 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: sparse\_to\_dense (from tensorflow.python.ops.sparse\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Create a `tf.sparse.SparseTensor` and use `tf.sparse.to\_dense` instead.

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: to\_float (from tensorflow.python.ops.math\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.cast` instead.

W0818 21:24:18.390786 140450831300416 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: to\_float (from tensorflow.python.ops.math\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.cast` instead.

INFO:tensorflow:Waiting for new checkpoint at /opt/training

I0818 21:24:20.712522 140450831300416 checkpoint\_utils.py:168] Waiting for new checkpoint at /opt/training

INFO:tensorflow:Found new checkpoint at /opt/training/ckpt-3

I0818 21:24:20.713132 140450831300416 checkpoint\_utils.py:177] Found new checkpoint at /opt/training/ckpt-3

/usr/local/lib/python3.8/dist-packages/keras/src/backend.py:452: UserWarning: `tf.keras.backend.set\_learning\_phase` is deprecated and will be removed after 2020-10-11. To update it, simply pass a True/False value to the `training` argument of the `\_\_call\_\_` method of your layer or model.

warnings.warn(

I0818 21:24:25.868683 140450831300416 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

I0818 21:24:37.421303 140450831300416 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: to\_int64 (from tensorflow.python.ops.math\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.cast` instead.

W0818 21:24:41.672977 140450831300416 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/util/dispatch.py:1176: to\_int64 (from tensorflow.python.ops.math\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.cast` instead.

INFO:tensorflow:Finished eval step 0

I0818 21:24:41.691991 140450831300416 model\_lib\_v2.py:966] Finished eval step 0

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py:460: py\_func (from tensorflow.python.ops.script\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

tf.py\_func is deprecated in TF V2. Instead, there are two

options available in V2.

- tf.py\_function takes a python function which manipulates tf eager

tensors instead of numpy arrays. It's easy to convert a tf eager tensor to

an ndarray (just call tensor.numpy()) but having access to eager tensors

means `tf.py\_function`s can use accelerators such as GPUs as well as

being differentiable using a gradient tape.

- tf.numpy\_function maintains the semantics of the deprecated tf.py\_func

(it is not differentiable, and manipulates numpy arrays). It drops the

stateful argument making all functions stateful.

W0818 21:24:41.815270 140450831300416 deprecation.py:364] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py:460: py\_func (from tensorflow.python.ops.script\_ops) is deprecated and will be removed in a future version.

Instructions for updating:

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being differentiable using a gradient tape.

- tf.numpy\_function maintains the semantics of the deprecated tf.py\_func

(it is not differentiable, and manipulates numpy arrays). It drops the

stateful argument making all functions stateful.

Traceback (most recent call last):

File "model\_main\_tf2.py", line 114, in <module>

tf.compat.v1.app.run()

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/platform/app.py", line 36, in run

\_run(main=main, argv=argv, flags\_parser=\_parse\_flags\_tolerate\_undef)

File "/usr/local/lib/python3.8/dist-packages/absl/app.py", line 308, in run

\_run\_main(main, args)

File "/usr/local/lib/python3.8/dist-packages/absl/app.py", line 254, in \_run\_main

sys.exit(main(argv))

File "model\_main\_tf2.py", line 81, in main

model\_lib\_v2.eval\_continuously(

File "/usr/local/lib/python3.8/dist-packages/object\_detection/model\_lib\_v2.py", line 1158, in eval\_continuously

eager\_eval\_loop(

File "/usr/local/lib/python3.8/dist-packages/object\_detection/model\_lib\_v2.py", line 970, in eager\_eval\_loop

sbys\_image\_list = vutils.draw\_side\_by\_side\_evaluation\_image(

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 713, in draw\_side\_by\_side\_evaluation\_image

images\_with\_detections = draw\_bounding\_boxes\_on\_image\_tensors(

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 622, in draw\_bounding\_boxes\_on\_image\_tensors

images = tf.map\_fn(draw\_boxes, elems, dtype=tf.uint8, back\_prop=False)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/util/deprecation.py", line 576, in new\_func

return func(\*args, \*\*kwargs)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/ops/map\_fn.py", line 498, in map\_fn

\_, r\_a = while\_loop.while\_loop(

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/ops/while\_loop.py", line 499, in while\_loop

loop\_vars = body(\*loop\_vars)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/ops/while\_loop.py", line 490, in <lambda>

body = lambda i, lv: (i + 1, orig\_body(\*lv))

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/ops/map\_fn.py", line 488, in compute

result\_value = autographed\_fn(elems\_value)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py", line 693, in wrapper

raise e.ag\_error\_metadata.to\_exception(e)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py", line 690, in wrapper

return converted\_call(f, args, kwargs, options=options)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py", line 439, in converted\_call

result = converted\_f(\*effective\_args, \*\*kwargs)

File "/tmp/\_\_autograph\_generated\_filesnepu14c.py", line 47, in tf\_\_draw\_boxes

image\_with\_boxes = ag\_\_.converted\_call(ag\_\_.ld(tf).py\_func, (ag\_\_.ld(visualize\_boxes\_fn), ag\_\_.ld(image\_and\_detections)[2:], ag\_\_.ld(tf).uint8), None, fscope)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py", line 377, in converted\_call

return \_call\_unconverted(f, args, kwargs, options)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py", line 460, in \_call\_unconverted

return f(\*args)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/util/deprecation.py", line 371, in new\_func

return func(\*args, \*\*kwargs)

File "/usr/local/lib/python3.8/dist-packages/tensorflow/python/util/traceback\_utils.py", line 153, in error\_handler

raise e.with\_traceback(filtered\_tb) from None

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 398, in visualization\_py\_func\_fn

return visualize\_boxes\_and\_labels\_on\_image\_array(

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 1251, in visualize\_boxes\_and\_labels\_on\_image\_array

draw\_bounding\_box\_on\_image\_array(

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 160, in draw\_bounding\_box\_on\_image\_array

draw\_bounding\_box\_on\_image(image\_pil, ymin, xmin, ymax, xmax, color,

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 219, in draw\_bounding\_box\_on\_image

display\_str\_heights = [font.getbbox(ds)[3] for ds in display\_str\_list]

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 219, in <listcomp>

display\_str\_heights = [font.getbbox(ds)[3] for ds in display\_str\_list]

AttributeError: in user code:

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 618, in draw\_boxes \*

image\_with\_boxes = tf.py\_func(visualize\_boxes\_fn, image\_and\_detections[2:],

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 398, in visualization\_py\_func\_fn

return visualize\_boxes\_and\_labels\_on\_image\_array(

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 1251, in visualize\_boxes\_and\_labels\_on\_image\_array

draw\_bounding\_box\_on\_image\_array(

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 160, in draw\_bounding\_box\_on\_image\_array

draw\_bounding\_box\_on\_image(image\_pil, ymin, xmin, ymax, xmax, color,

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 219, in draw\_bounding\_box\_on\_image

display\_str\_heights = [font.getbbox(ds)[3] for ds in display\_str\_list]

File "/usr/local/lib/python3.8/dist-packages/object\_detection/utils/visualization\_utils.py", line 219, in <listcomp>

display\_str\_heights = [font.getbbox(ds)[3] for ds in display\_str\_list]

AttributeError: 'ImageFont' object has no attribute 'getbbox'

==EXPORTING THE MODEL==

WARNING:tensorflow:From /usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py:459: calling map\_fn\_v2 (from tensorflow.python.ops.map\_fn) with back\_prop=False is deprecated and will be removed in a future version.

Instructions for updating:

back\_prop=False is deprecated. Consider using tf.stop\_gradient instead.

Instead of:

results = tf.map\_fn(fn, elems, back\_prop=False)

Use:

results = tf.nest.map\_structure(tf.stop\_gradient, tf.map\_fn(fn, elems))

W0818 21:24:46.470895 140272193849152 deprecation.py:641] From /usr/local/lib/python3.8/dist-packages/tensorflow/python/autograph/impl/api.py:459: calling map\_fn\_v2 (from tensorflow.python.ops.map\_fn) with back\_prop=False is deprecated and will be removed in a future version.

Instructions for updating:

back\_prop=False is deprecated. Consider using tf.stop\_gradient instead.

Instead of:

results = tf.map\_fn(fn, elems, back\_prop=False)

Use:

results = tf.nest.map\_structure(tf.stop\_gradient, tf.map\_fn(fn, elems))

I0818 21:24:50.273458 140272193849152 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

I0818 21:24:58.757875 140272193849152 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

I0818 21:25:01.368822 140272193849152 signature\_serialization.py:148] Function `call\_func` contains input name(s) resource with unsupported characters which will be renamed to weightsharedconvolutionalboxpredictor\_predictiontower\_conv2d\_3\_batchnorm\_feature\_4\_fusedbatchnormv3\_readvariableop\_1\_resource in the SavedModel.

I0818 21:25:02.526404 140272193849152 api.py:460] feature\_map\_spatial\_dims: [(80, 80), (40, 40), (20, 20), (10, 10), (5, 5)]

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.meta\_architectures.ssd\_meta\_arch.SSDMetaArch object at 0x7f932827b040>, because it is not built.

W0818 21:25:04.736757 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.meta\_architectures.ssd\_meta\_arch.SSDMetaArch object at 0x7f932827b040>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.convolutional.separable\_conv2d.SeparableConv2D object at 0x7f92f4999070>, because it is not built.

W0818 21:25:05.001085 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.convolutional.separable\_conv2d.SeparableConv2D object at 0x7f92f4999070>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4996ca0>, because it is not built.

W0818 21:25:05.001269 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4996ca0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49961c0>, because it is not built.

W0818 21:25:05.001344 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49961c0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.convolutional.separable\_conv2d.SeparableConv2D object at 0x7f92f4996c10>, because it is not built.

W0818 21:25:05.001430 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.convolutional.separable\_conv2d.SeparableConv2D object at 0x7f92f4996c10>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4996a00>, because it is not built.

W0818 21:25:05.001510 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4996a00>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4996340>, because it is not built.

W0818 21:25:05.001586 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4996340>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.convolutional.separable\_conv2d.SeparableConv2D object at 0x7f92f49ae490>, because it is not built.

W0818 21:25:05.001660 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.convolutional.separable\_conv2d.SeparableConv2D object at 0x7f92f49ae490>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f49ae310>, because it is not built.

W0818 21:25:05.001731 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f49ae310>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49aec40>, because it is not built.

W0818 21:25:05.001798 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49aec40>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.convolutional.separable\_conv2d.SeparableConv2D object at 0x7f92f49aedc0>, because it is not built.

W0818 21:25:05.001866 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.convolutional.separable\_conv2d.SeparableConv2D object at 0x7f92f49aedc0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4abbac0>, because it is not built.

W0818 21:25:05.001931 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4abbac0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4abbc40>, because it is not built.

W0818 21:25:05.001998 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4abbc40>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4cb6880>, because it is not built.

W0818 21:25:05.002065 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4cb6880>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f93100594f0>, because it is not built.

W0818 21:25:05.002131 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f93100594f0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4df53a0>, because it is not built.

W0818 21:25:05.002198 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4df53a0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4df54c0>, because it is not built.

W0818 21:25:05.002265 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4df54c0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4b61040>, because it is not built.

W0818 21:25:05.002335 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4b61040>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4b615b0>, because it is not built.

W0818 21:25:05.002402 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4b615b0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f49bfdf0>, because it is not built.

W0818 21:25:05.002471 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f49bfdf0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49bfe80>, because it is not built.

W0818 21:25:05.002537 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49bfe80>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4d4c4f0>, because it is not built.

W0818 21:25:05.002604 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4d4c4f0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49f9dc0>, because it is not built.

W0818 21:25:05.002671 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49f9dc0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f49f99a0>, because it is not built.

W0818 21:25:05.002725 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f49f99a0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49f9f70>, because it is not built.

W0818 21:25:05.002789 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49f9f70>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f49170d0>, because it is not built.

W0818 21:25:05.002843 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f49170d0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4917130>, because it is not built.

W0818 21:25:05.002901 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4917130>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4917a60>, because it is not built.

W0818 21:25:05.002966 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4917a60>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49179d0>, because it is not built.

W0818 21:25:05.003039 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f49179d0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4923eb0>, because it is not built.

W0818 21:25:05.003112 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f4923eb0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4882820>, because it is not built.

W0818 21:25:05.003180 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f4882820>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f489a190>, because it is not built.

W0818 21:25:05.003275 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f489a190>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f489a250>, because it is not built.

W0818 21:25:05.003360 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f489a250>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f489a760>, because it is not built.

W0818 21:25:05.003431 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f489a760>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f489a820>, because it is not built.

W0818 21:25:05.003494 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f489a820>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f489ad30>, because it is not built.

W0818 21:25:05.003554 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f489ad30>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f489adf0>, because it is not built.

W0818 21:25:05.003620 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f489adf0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f48a4040>, because it is not built.

W0818 21:25:05.003678 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f48a4040>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f48a75e0>, because it is not built.

W0818 21:25:05.003748 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f48a75e0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f48a7af0>, because it is not built.

W0818 21:25:05.003833 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f48a7af0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f48a7bb0>, because it is not built.

W0818 21:25:05.003895 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f48a7bb0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f48a8100>, because it is not built.

W0818 21:25:05.003959 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f48a8100>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f48a81c0>, because it is not built.

W0818 21:25:05.004026 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f48a81c0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f48a86d0>, because it is not built.

W0818 21:25:05.004114 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <object\_detection.core.freezable\_batch\_norm.FreezableBatchNorm object at 0x7f92f48a86d0>, because it is not built.

WARNING:tensorflow:Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f48a8790>, because it is not built.

W0818 21:25:05.004179 140272193849152 save\_impl.py:66] Skipping full serialization of Keras layer <keras.src.layers.core.lambda\_layer.Lambda object at 0x7f92f48a8790>, because it is not built.

I0818 21:25:16.103998 140272193849152 save.py:274] Found untraced functions such as WeightSharedConvolutionalBoxPredictor\_layer\_call\_fn, WeightSharedConvolutionalBoxPredictor\_layer\_call\_and\_return\_conditional\_losses, WeightSharedConvolutionalBoxHead\_layer\_call\_fn, WeightSharedConvolutionalBoxHead\_layer\_call\_and\_return\_conditional\_losses, WeightSharedConvolutionalClassHead\_layer\_call\_fn while saving (showing 5 of 173). These functions will not be directly callable after loading.

2023-08-18 21:25:27 Uploading - Uploading generated training modelINFO:tensorflow:Assets written to: /tmp/exported/saved\_model/assets

I0818 21:25:21.288776 140272193849152 builder\_impl.py:804] Assets written to: /tmp/exported/saved\_model/assets

I0818 21:25:21.601941 140272193849152 fingerprinting\_utils.py:48] Writing fingerprint to /tmp/exported/saved\_model/fingerprint.pb

INFO:tensorflow:Writing pipeline config file to /tmp/exported/pipeline.config

I0818 21:25:22.091163 140272193849152 config\_util.py:253] Writing pipeline config file to /tmp/exported/pipeline.config

2023-08-18 21:25:23,315 sagemaker-training-toolkit INFO Reporting training SUCCESS

2023-08-18 21:25:38 Completed - Training job completed

Training seconds: 6990

Billable seconds: 6990