tu012@b020:/datasets/work/d61-mission-wp2/work/David/dreamwalk> python3 train2.py

2020-08-07 00:11:15.667075: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

TF version: 2.2.0

Hub version: 0.8.0

WARNING: Logging before flag parsing goes to stderr.

W0807 00:11:18.626636 46912496467904 deprecation.py:323] From train2.py:12: is\_gpu\_available (from tensorflow.python.framework.test\_util) is deprecated and will be removed in a future version.

Instructions for updating:

Use `tf.config.list\_physical\_devices('GPU')` instead.

2020-08-07 00:11:18.629288: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcuda.so.1

2020-08-07 00:11:21.358818: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 0 with properties:

pciBusID: 0000:04:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:21.359945: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 1 with properties:

pciBusID: 0000:06:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:21.360955: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 2 with properties:

pciBusID: 0000:07:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:21.361976: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 3 with properties:

pciBusID: 0000:08:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:21.362056: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

2020-08-07 00:11:21.363475: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcublas.so.9.0

2020-08-07 00:11:21.364818: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcufft.so.9.0

2020-08-07 00:11:21.365250: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcurand.so.9.0

2020-08-07 00:11:21.380131: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusolver.so.9.0

2020-08-07 00:11:21.381478: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusparse.so.9.0

2020-08-07 00:11:21.385097: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudnn.so.7

2020-08-07 00:11:21.392575: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1703] Adding visible gpu devices: 0, 1, 2, 3

2020-08-07 00:11:21.392645: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

2020-08-07 00:11:22.668712: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1102] Device interconnect StreamExecutor with strength 1 edge matrix:

2020-08-07 00:11:22.668841: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1108] 0 1 2 3

2020-08-07 00:11:22.668876: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 0: N Y Y Y

2020-08-07 00:11:22.668922: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 1: Y N Y Y

2020-08-07 00:11:22.668952: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 2: Y Y N Y

2020-08-07 00:11:22.668979: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 3: Y Y Y N

2020-08-07 00:11:22.674970: W tensorflow/core/common\_runtime/gpu/gpu\_bfc\_allocator.cc:39] Overriding allow\_growth setting because the TF\_FORCE\_GPU\_ALLOW\_GROWTH environment variable is set. Original config value was 0.

2020-08-07 00:11:22.675044: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1247] Created TensorFlow device (/device:GPU:0 with 14969 MB memory) -> physical GPU (device: 0, name: Tesla P100-SXM2-16GB, pci bus id: 0000:04:00.0, compute capability: 6.0)

2020-08-07 00:11:22.677305: W tensorflow/core/common\_runtime/gpu/gpu\_bfc\_allocator.cc:39] Overriding allow\_growth setting because the TF\_FORCE\_GPU\_ALLOW\_GROWTH environment variable is set. Original config value was 0.

2020-08-07 00:11:22.677364: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1247] Created TensorFlow device (/device:GPU:1 with 14969 MB memory) -> physical GPU (device: 1, name: Tesla P100-SXM2-16GB, pci bus id: 0000:06:00.0, compute capability: 6.0)

2020-08-07 00:11:22.679465: W tensorflow/core/common\_runtime/gpu/gpu\_bfc\_allocator.cc:39] Overriding allow\_growth setting because the TF\_FORCE\_GPU\_ALLOW\_GROWTH environment variable is set. Original config value was 0.

2020-08-07 00:11:22.679523: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1247] Created TensorFlow device (/device:GPU:2 with 14969 MB memory) -> physical GPU (device: 2, name: Tesla P100-SXM2-16GB, pci bus id: 0000:07:00.0, compute capability: 6.0)

2020-08-07 00:11:22.681658: W tensorflow/core/common\_runtime/gpu/gpu\_bfc\_allocator.cc:39] Overriding allow\_growth setting because the TF\_FORCE\_GPU\_ALLOW\_GROWTH environment variable is set. Original config value was 0.

2020-08-07 00:11:22.681715: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1247] Created TensorFlow device (/device:GPU:3 with 14969 MB memory) -> physical GPU (device: 3, name: Tesla P100-SXM2-16GB, pci bus id: 0000:08:00.0, compute capability: 6.0)

GPU is available

Using https://tfhub.dev/google/imagenet/mobilenet\_v2\_140\_224/feature\_vector/4 with input size (224, 224)

Found 62384 images belonging to 250 classes.

Found 15479 images belonging to 250 classes.

Building model with https://tfhub.dev/google/imagenet/mobilenet\_v2\_140\_224/feature\_vector/4

2020-08-07 00:11:25.514711: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 0 with properties:

pciBusID: 0000:04:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:25.515852: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 1 with properties:

pciBusID: 0000:06:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:25.516915: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 2 with properties:

pciBusID: 0000:07:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:25.517993: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 3 with properties:

pciBusID: 0000:08:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:25.518089: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

2020-08-07 00:11:25.518151: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcublas.so.9.0

2020-08-07 00:11:25.518203: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcufft.so.9.0

2020-08-07 00:11:25.518269: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcurand.so.9.0

2020-08-07 00:11:25.518318: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusolver.so.9.0

2020-08-07 00:11:25.518368: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusparse.so.9.0

2020-08-07 00:11:25.518416: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudnn.so.7

2020-08-07 00:11:25.526272: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1703] Adding visible gpu devices: 0, 1, 2, 3

2020-08-07 00:11:25.527647: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 0 with properties:

pciBusID: 0000:04:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:25.528687: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 1 with properties:

pciBusID: 0000:06:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:25.529747: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 2 with properties:

pciBusID: 0000:07:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:25.530836: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1561] Found device 3 with properties:

pciBusID: 0000:08:00.0 name: Tesla P100-SXM2-16GB computeCapability: 6.0

coreClock: 1.4805GHz coreCount: 56 deviceMemorySize: 15.90GiB deviceMemoryBandwidth: 681.88GiB/s

2020-08-07 00:11:25.530895: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

2020-08-07 00:11:25.530946: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcublas.so.9.0

2020-08-07 00:11:25.530995: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcufft.so.9.0

2020-08-07 00:11:25.531042: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcurand.so.9.0

2020-08-07 00:11:25.531092: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusolver.so.9.0

2020-08-07 00:11:25.531139: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusparse.so.9.0

2020-08-07 00:11:25.531187: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudnn.so.7

2020-08-07 00:11:25.538679: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1703] Adding visible gpu devices: 0, 1, 2, 3

2020-08-07 00:11:25.538764: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1102] Device interconnect StreamExecutor with strength 1 edge matrix:

2020-08-07 00:11:25.538803: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1108] 0 1 2 3

2020-08-07 00:11:25.538833: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 0: N Y Y Y

2020-08-07 00:11:25.538860: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 1: Y N Y Y

2020-08-07 00:11:25.538886: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 2: Y Y N Y

2020-08-07 00:11:25.538911: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 3: Y Y Y N

2020-08-07 00:11:25.543717: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1247] Created TensorFlow device (/job:localhost/replica:0/task:0/device:GPU:0 with 14969 MB memory) -> physical GPU (device: 0, name: Tesla P100-SXM2-16GB, pci bus id: 0000:04:00.0, compute capability: 6.0)

2020-08-07 00:11:25.544712: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1247] Created TensorFlow device (/job:localhost/replica:0/task:0/device:GPU:1 with 14969 MB memory) -> physical GPU (device: 1, name: Tesla P100-SXM2-16GB, pci bus id: 0000:06:00.0, compute capability: 6.0)

2020-08-07 00:11:25.545700: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1247] Created TensorFlow device (/job:localhost/replica:0/task:0/device:GPU:2 with 14969 MB memory) -> physical GPU (device: 2, name: Tesla P100-SXM2-16GB, pci bus id: 0000:07:00.0, compute capability: 6.0)

2020-08-07 00:11:25.546780: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1247] Created TensorFlow device (/job:localhost/replica:0/task:0/device:GPU:3 with 14969 MB memory) -> physical GPU (device: 3, name: Tesla P100-SXM2-16GB, pci bus id: 0000:08:00.0, compute capability: 6.0)

2020-08-07 00:11:25.546857: I tensorflow/core/common\_runtime/process\_util.cc:147] Creating new thread pool with default inter op setting: 2. Tune using inter\_op\_parallelism\_threads for best performance.

W0807 00:11:27.563827 46912496467904 ag\_logging.py:146] AutoGraph could not transform <bound method KerasLayer.call of <tensorflow\_hub.keras\_layer.KerasLayer object at 0x2aab5f64d0f0>> and will run it as-is.

Please report this to the TensorFlow team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERBOSITY=10`) and attach the full output.

Cause: module 'gast' has no attribute 'Constant'

To silence this warning, decorate the function with @tf.autograph.experimental.do\_not\_convert

Model: "sequential"

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Layer (type) Output Shape Param #

=================================================================

keras\_layer (KerasLayer) (None, 1792) 4363712

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

dense (Dense) (None, 250) 448250

=================================================================

Total params: 4,811,962

Trainable params: 448,250

Non-trainable params: 4,363,712

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Epoch 1/10

W0807 00:11:36.373958 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function Model.make\_train\_function.<locals>.train\_function at 0x2aab7afd6d90> and will run it as-is.

Please report this to the TensorFlow team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERBOSITY=10`) and attach the full output.

Cause: Bad argument number for Name: 4, expecting 3

To silence this warning, decorate the function with @tf.autograph.experimental.do\_not\_convert

2020-08-07 00:11:38.255915: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 310 in the outer inference context.

2020-08-07 00:11:38.256057: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 278 in the outer inference context.

2020-08-07 00:11:38.256175: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 402 in the outer inference context.

2020-08-07 00:11:38.256222: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 379 in the outer inference context.

2020-08-07 00:11:38.256267: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 334 in the outer inference context.

2020-08-07 00:11:38.256316: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 267 in the outer inference context.

2020-08-07 00:11:38.256356: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 357 in the outer inference context.

2020-08-07 00:11:38.256438: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 299 in the outer inference context.

2020-08-07 00:11:38.256487: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 323 in the outer inference context.

2020-08-07 00:11:38.256559: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 391 in the outer inference context.

2020-08-07 00:11:38.256600: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 368 in the outer inference context.

2020-08-07 00:11:38.256673: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 345 in the outer inference context.

2020-08-07 00:11:38.256746: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 288 in the outer inference context.

2020-08-07 00:11:38.256791: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 256 in the outer inference context.

2020-08-07 00:11:38.256850: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 233 in the outer inference context.

2020-08-07 00:11:38.256916: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 132 in the outer inference context.

2020-08-07 00:11:38.256993: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 570 in the outer inference context.

2020-08-07 00:11:38.257062: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 546 in the outer inference context.

2020-08-07 00:11:38.257097: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 535 in the outer inference context.

2020-08-07 00:11:38.257135: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 514 in the outer inference context.

2020-08-07 00:11:38.257204: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 624 in the outer inference context.

2020-08-07 00:11:38.257275: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 602 in the outer inference context.

2020-08-07 00:11:38.257325: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 458 in the outer inference context.

2020-08-07 00:11:38.257385: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 503 in the outer inference context.

2020-08-07 00:11:38.257435: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 434 in the outer inference context.

2020-08-07 00:11:38.257485: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 591 in the outer inference context.

2020-08-07 00:11:38.257526: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 559 in the outer inference context.

2020-08-07 00:11:38.257563: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 480 in the outer inference context.

2020-08-07 00:11:38.257611: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 646 in the outer inference context.

2020-08-07 00:11:38.257651: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 613 in the outer inference context.

2020-08-07 00:11:38.257690: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 209 in the outer inference context.

2020-08-07 00:11:38.257754: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 635 in the outer inference context.

2020-08-07 00:11:38.257798: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 581 in the outer inference context.

2020-08-07 00:11:38.257845: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 492 in the outer inference context.

2020-08-07 00:11:38.257894: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 413 in the outer inference context.

2020-08-07 00:11:38.257994: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 187 in the outer inference context.

2020-08-07 00:11:38.258036: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 469 in the outer inference context.

2020-08-07 00:11:38.258078: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 423 in the outer inference context.

2020-08-07 00:11:38.258140: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 222 in the outer inference context.

2020-08-07 00:11:38.258190: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 445 in the outer inference context.

2020-08-07 00:11:38.258275: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 198 in the outer inference context.

2020-08-07 00:11:38.258334: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 108 in the outer inference context.

2020-08-07 00:11:38.258380: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 244 in the outer inference context.

2020-08-07 00:11:38.258428: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 177 in the outer inference context.

2020-08-07 00:11:38.258466: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 524 in the outer inference context.

2020-08-07 00:11:38.258538: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 155 in the outer inference context.

2020-08-07 00:11:38.258589: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 76 in the outer inference context.

2020-08-07 00:11:38.258660: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 86 in the outer inference context.

2020-08-07 00:11:38.258728: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 121 in the outer inference context.

2020-08-07 00:11:38.258788: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 166 in the outer inference context.

2020-08-07 00:11:38.258858: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 143 in the outer inference context.

2020-08-07 00:11:38.258901: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 97 in the outer inference context.

2020-08-07 00:11:38.547233: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 209 in the outer inference context.

2020-08-07 00:11:38.547387: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 323 in the outer inference context.

2020-08-07 00:11:38.547440: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 368 in the outer inference context.

2020-08-07 00:11:38.547484: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 345 in the outer inference context.

2020-08-07 00:11:38.547582: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 222 in the outer inference context.

2020-08-07 00:11:38.547634: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 86 in the outer inference context.

2020-08-07 00:11:38.547710: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 143 in the outer inference context.

2020-08-07 00:11:38.547758: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 288 in the outer inference context.

2020-08-07 00:11:38.547815: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 121 in the outer inference context.

2020-08-07 00:11:38.547852: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 166 in the outer inference context.

2020-08-07 00:11:38.547900: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 244 in the outer inference context.

2020-08-07 00:11:38.547967: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 97 in the outer inference context.

2020-08-07 00:11:38.548036: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 570 in the outer inference context.

2020-08-07 00:11:38.548110: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 492 in the outer inference context.

2020-08-07 00:11:38.548154: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 546 in the outer inference context.

2020-08-07 00:11:38.548189: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 535 in the outer inference context.

2020-08-07 00:11:38.548226: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 514 in the outer inference context.

2020-08-07 00:11:38.548265: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 624 in the outer inference context.

2020-08-07 00:11:38.548356: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 445 in the outer inference context.

2020-08-07 00:11:38.548411: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 602 in the outer inference context.

2020-08-07 00:11:38.548462: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 458 in the outer inference context.

2020-08-07 00:11:38.548507: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 646 in the outer inference context.

2020-08-07 00:11:38.548591: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 613 in the outer inference context.

2020-08-07 00:11:38.548631: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 591 in the outer inference context.

2020-08-07 00:11:38.548671: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 559 in the outer inference context.

2020-08-07 00:11:38.548713: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 480 in the outer inference context.

2020-08-07 00:11:38.548756: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 434 in the outer inference context.

2020-08-07 00:11:38.548793: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 413 in the outer inference context.

2020-08-07 00:11:38.548840: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 581 in the outer inference context.

2020-08-07 00:11:38.548935: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 503 in the outer inference context.

2020-08-07 00:11:38.548974: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 187 in the outer inference context.

2020-08-07 00:11:38.549008: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 469 in the outer inference context.

2020-08-07 00:11:38.549097: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 423 in the outer inference context.

2020-08-07 00:11:38.549236: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 524 in the outer inference context.

2020-08-07 00:11:38.549316: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 177 in the outer inference context.

2020-08-07 00:11:38.549361: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 635 in the outer inference context.

2020-08-07 00:11:38.549401: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 108 in the outer inference context.

2020-08-07 00:11:38.549455: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 256 in the outer inference context.

2020-08-07 00:11:38.549491: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 198 in the outer inference context.

2020-08-07 00:11:38.549589: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 76 in the outer inference context.

2020-08-07 00:11:38.549625: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 278 in the outer inference context.

2020-08-07 00:11:38.549677: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 155 in the outer inference context.

2020-08-07 00:11:38.549731: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 402 in the outer inference context.

2020-08-07 00:11:38.549785: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 132 in the outer inference context.

2020-08-07 00:11:38.549825: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 267 in the outer inference context.

2020-08-07 00:11:38.549901: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 357 in the outer inference context.

2020-08-07 00:11:38.549948: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 334 in the outer inference context.

2020-08-07 00:11:38.549986: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 310 in the outer inference context.

2020-08-07 00:11:38.550030: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 379 in the outer inference context.

2020-08-07 00:11:38.550116: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 233 in the outer inference context.

2020-08-07 00:11:38.550157: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 299 in the outer inference context.

2020-08-07 00:11:38.550192: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 391 in the outer inference context.

2020-08-07 00:11:39.599128: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcublas.so.9.0

2020-08-07 00:11:39.886114: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudnn.so.7

2020-08-07 00:11:41.020775: W tensorflow/stream\_executor/gpu/asm\_compiler.cc:116] \*\*\* WARNING \*\*\* You are using ptxas 9.0.424, which is older than 9.2.88. ptxas 9.x before 9.2.88 is known to miscompile XLA code, leading to incorrect results or invalid-address errors.

You do not need to update to CUDA 9.2.88; cherry-picking the ptxas binary is sufficient.

1/487 [..............................] - ETA: 0s - loss: 5.9004 - categorical\_accuracy: 0.0078/apps/python/3.7.2/lib/python3.7/site-packages/PIL/Image.py:989: UserWarning: Palette images with Transparency expressed in bytes should be converted to RGBA images

28/487 [>.............................] - ETA: 52:19 - loss: 5.4777 - categorical\_accuracy: 0.0441/apps/python/3.7.2/lib/python3.7/site-packages/PIL/TiffImagePlugin.py:802: UserWarning: Corrupt EXIF data. Expecting to read 2 bytes but only got 0.

133/487 [=======>......................] - ETA: 42:02 - loss: 3.7426 - categorical\_accuracy: 0.3894/apps/python/3.7.2/lib/python3.7/site-packages/PIL/TiffImagePlugin.py:784: UserWarning: Possibly corrupt EXIF data. Expecting to read 12 bytes but only got 10. Skipping tag 42037

253/487 [==============>...............] - ETA: 27:40 - loss: 3.1849 - categorical\_accuracy: 0.5145/apps/python/3.7.2/lib/python3.7/site-packages/PIL/TiffImagePlugin.py:802: UserWarning: Corrupt EXIF data. Expecting to read 12 bytes but only got 10.

451/487 [==========================>...] - ETA: 4:18 - loss: 2.8152 - categorical\_accuracy: 0.5904/apps/python/3.7.2/lib/python3.7/site-packages/PIL/TiffImagePlugin.py:802: UserWarning: Corrupt EXIF data. Expecting to read 4 bytes but only got 0.

487/487 [==============================] - ETA: 0s - loss: 2.7721 - categorical\_accuracy: 0.5977W0807 01:10:25.125538 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function Model.make\_test\_function.<locals>.test\_function at 0x2aab9796d488> and will run it as-is.

Please report this to the TensorFlow team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERBOSITY=10`) and attach the full output.

Cause: Bad argument number for Name: 4, expecting 3

To silence this warning, decorate the function with @tf.autograph.experimental.do\_not\_convert

487/487 [==============================] - 4138s 8s/step - loss: 2.7721 - categorical\_accuracy: 0.5977 - val\_loss: 2.0222 - val\_categorical\_accuracy: 0.7365 - lr: 0.0050

Epoch 2/10

487/487 [==============================] - ETA: 0s - loss: 1.9534 - categorical\_accuracy: 0.7488W0807 02:04:53.564263 469487/487 [==============================] - 2653s 5s/step - loss: 1.9534 - categorical\_accuracy: 0.7488 - val\_loss: 1.9017 - val\_categorical\_accuracy: 0.7650 - lr: 0.0050

Epoch 3/10

487/487 [==============================] - ETA: 0s - loss: 1.8067 - categorical\_accuracy: 0.7869W0807 02:52:30.134477 469487/487 [==============================] - 2856s 6s/step - loss: 1.8067 - categorical\_accuracy: 0.7869 - val\_loss: 1.8556 - val\_categorical\_accuracy: 0.7788 - lr: 0.0050

Epoch 4/10

487/487 [==============================] - ETA: 0s - loss: 1.7406 - categorical\_accuracy: 0.8080

Epoch 00004: ReduceLROnPlateau reducing learning rate to 0.0009999999776482583.

487/487 [==============================] - 2727s 6s/step - loss: 1.7406 - categorical\_accuracy: 0.8080 - val\_loss: 1.8659 - val\_categorical\_accuracy: 0.7760 - lr: 0.0050

Epoch 5/10

487/487 [==============================] - ETA: 0s - loss: 1.6556 - categorical\_accuracy: 0.8342W0807 04:22:16.034860 469487/487 [==============================] - 2659s 5s/step - loss: 1.6556 - categorical\_accuracy: 0.8342 - val\_loss: 1.7933 - val\_categorical\_accuracy: 0.7958 - lr: 1.0000e-03

Epoch 6/10

487/487 [==============================] - ETA: 0s - loss: 1.5807 - categorical\_accuracy: 0.8574W0807 05:06:35.066174 469487/487 [==============================] - 2659s 5s/step - loss: 1.5807 - categorical\_accuracy: 0.8574 - val\_loss: 1.7782 - val\_categorical\_accuracy: 0.7980 - lr: 1.0000e-03

Epoch 7/10

487/487 [==============================] - ETA: 0s - loss: 1.5668 - categorical\_accuracy: 0.8616W0807 05:50:55.682122 469487/487 [==============================] - 2661s 5s/step - loss: 1.5668 - categorical\_accuracy: 0.8616 - val\_loss: 1.7736 - val\_categorical\_accuracy: 0.7990 - lr: 1.0000e-03

Epoch 8/10

487/487 [==============================] - ETA: 0s - loss: 1.5552 - categorical\_accuracy: 0.8661W0807 06:35:10.904001 469487/487 [==============================] - 2655s 5s/step - loss: 1.5552 - categorical\_accuracy: 0.8661 - val\_loss: 1.7656 - val\_categorical\_accuracy: 0.8021 - lr: 1.0000e-03

Epoch 9/10

487/487 [==============================] - ETA: 0s - loss: 1.5476 - categorical\_accuracy: 0.8695W0807 07:19:12.371405 469487/487 [==============================] - 2641s 5s/step - loss: 1.5476 - categorical\_accuracy: 0.8695 - val\_loss: 1.7629 - val\_categorical\_accuracy: 0.8031 - lr: 1.0000e-03

Epoch 10/10

487/487 [==============================] - ETA: 0s - loss: 1.5391 - categorical\_accuracy: 0.8710W0807 08:03:20.721306 469487/487 [==============================] - 2648s 5s/step - loss: 1.5391 - categorical\_accuracy: 0.8710 - val\_loss: 1.7622 - val\_categorical\_accuracy: 0.8021 - lr: 1.0000e-03

2020-08-07 08:03:22.188585: W tensorflow/python/util/util.cc:329] Sets are not currently considered sequences, but this may change in the future, so consider avoiding using them.

W0807 08:03:22.200875 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function canonicalize\_signatures.<locals>.signature\_wrapper at 0x2aab97c7b488> and will run it as-is.

Please report this to the TensorFlow team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERBOSITY=10`) and attach the full output.

Cause: Bad argument number for Name: 4, expecting 3

To silence this warning, decorate the function with @tf.autograph.experimental.do\_not\_convert

W0807 08:03:23.337833 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function KerasLayer.\_call\_loss\_if\_trainable.<locals>.<lambda> at 0x2aab5e59dbf8> and will run it as-is.

Please report this to the TensorFlow team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERBOSITY=10`) and attach the full output.

Cause: module 'gast' has no attribute 'Constant'

To silence this warning, decorate the function with @tf.autograph.experimental.do\_not\_convert

W0807 08:03:23.346308 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function Layer.\_handle\_weight\_regularization.<locals>.\_loss\_for\_variable at 0x2aab7a3d7268> and will run it as-is.

Please report this to the TensorFlow team. When filing the bug, set the verbosity to 10 (on Linux, `export AUTOGRAPH\_VERBOSITY=10`) and attach the full output.

Cause: Bad argument number for Name: 4, expecting 3

To silence this warning, decorate the function with @tf.autograph.experimental.do\_not\_convert

W0807 08:03:23.436300 46912496467904 deprecation.py:506] From /apps/tensorflow/2.2.0-py37-gcc5-gpu/lib/python3.7/site-packages/tensorflow/python/ops/resource\_variable\_ops.py:1817: calling BaseResourceVariable.\_\_init\_\_ (from tensorflow.python.ops.resource\_variable\_ops) with constraint is deprecated and will be removed in a future version.

Instructions for updating:

If using Keras pass \*\_constraint arguments to layers.