tu012@b030:/datasets/work/d61-mission-wp2/work/David/dreamwalk> python3 train2.py

2020-08-17 08:52:05.574128: 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.

W0817 08:52:09.328470 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.

2020-08-17 08:52:09.330362: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcuda.so.1

2020-08-17 08:52:12.378604: 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

2020-08-17 08:52:12.379782: 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

2020-08-17 08:52:12.380868: 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

2020-08-17 08:52:12.381944: 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

2020-08-17 08:52:12.382020: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

2020-08-17 08:52:12.383675: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcublas.so.9.0

2020-08-17 08:52:12.385108: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcufft.so.9.0

2020-08-17 08:52:12.385731: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcurand.so.9.0

2020-08-17 08:52:12.387113: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusolver.so.9.0

2020-08-17 08:52:12.388556: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusparse.so.9.0

2020-08-17 08:52:12.392313: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudnn.so.7

2020-08-17 08:52:12.399480: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1703] Adding visible gpu devices: 0, 1, 2, 3

2020-08-17 08:52:12.399518: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

2020-08-17 08:52:13.818898: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1102] Device interconnect StreamExecutor with strength 1 edge matrix:

2020-08-17 08:52:13.818953: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1108] 0 1 2 3

2020-08-17 08:52:13.818961: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 0: N Y Y Y

2020-08-17 08:52:13.818966: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 1: Y N Y Y

2020-08-17 08:52:13.818972: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 2: Y Y N Y

2020-08-17 08:52:13.819055: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 3: Y Y Y N

2020-08-17 08:52:13.825268: 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.

2020-08-17 08:52:13.825342: 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)

2020-08-17 08:52:13.827798: 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.

2020-08-17 08:52:13.827858: 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)

2020-08-17 08:52:13.830031: 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.

2020-08-17 08:52:13.830089: 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)

2020-08-17 08:52:13.832160: 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.

2020-08-17 08:52:13.832218: 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

2020-08-17 08:52:17.433923: 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

2020-08-17 08:52:17.435014: 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

2020-08-17 08:52:17.436085: 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

2020-08-17 08:52:17.437130: 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

2020-08-17 08:52:17.437231: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

2020-08-17 08:52:17.437325: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcublas.so.9.0

2020-08-17 08:52:17.437380: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcufft.so.9.0

2020-08-17 08:52:17.437433: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcurand.so.9.0

2020-08-17 08:52:17.437487: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusolver.so.9.0

2020-08-17 08:52:17.437540: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusparse.so.9.0

2020-08-17 08:52:17.437596: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudnn.so.7

2020-08-17 08:52:17.445275: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1703] Adding visible gpu devices: 0, 1, 2, 3

2020-08-17 08:52:17.446696: 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

2020-08-17 08:52:17.447819: 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

2020-08-17 08:52:17.448867: 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

2020-08-17 08:52:17.449885: 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

2020-08-17 08:52:17.449941: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudart.so.9.0

2020-08-17 08:52:17.449991: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcublas.so.9.0

2020-08-17 08:52:17.450063: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcufft.so.9.0

2020-08-17 08:52:17.450112: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcurand.so.9.0

2020-08-17 08:52:17.450162: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusolver.so.9.0

2020-08-17 08:52:17.450211: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcusparse.so.9.0

2020-08-17 08:52:17.450260: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudnn.so.7

2020-08-17 08:52:17.458105: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1703] Adding visible gpu devices: 0, 1, 2, 3

2020-08-17 08:52:17.458212: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1102] Device interconnect StreamExecutor with strength 1 edge matrix:

2020-08-17 08:52:17.458253: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1108] 0 1 2 3

2020-08-17 08:52:17.458285: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 0: N Y Y Y

2020-08-17 08:52:17.458314: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 1: Y N Y Y

2020-08-17 08:52:17.458341: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 2: Y Y N Y

2020-08-17 08:52:17.458369: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1121] 3: Y Y Y N

2020-08-17 08:52:17.463466: 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)

2020-08-17 08:52:17.464505: 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)

2020-08-17 08:52:17.465536: 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)

2020-08-17 08:52:17.466577: 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)

2020-08-17 08:52:17.466660: 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.

W0817 08:52:20.790330 46912496467904 ag\_logging.py:146] AutoGraph could not transform <bound method KerasLayer.call of <tensorflow\_hub.keras\_layer.KerasLayer object at 0x2aab43ed0e48>> 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\_1"

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

Layer (type) Output Shape Param #

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

sequential (Sequential) (None, 224, 224, 3) 0

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

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

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

dropout (Dropout) (None, 1792) 0

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

dense (Dense) (None, 250) 448250

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

Total params: 4,811,962

Trainable params: 448,250

Non-trainable params: 4,363,712

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

Epoch 1/10

W0817 08:52:35.776009 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function Model.make\_train\_function.<locals>.train\_function at 0x2aab7be2f488> 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

2020-08-17 08:52:37.703044: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 570 in the outer inference context.

2020-08-17 08:52:37.703178: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 546 in the outer inference context.

2020-08-17 08:52:37.703284: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 514 in the outer inference context.

2020-08-17 08:52:37.703349: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 535 in the outer inference context.

2020-08-17 08:52:37.703437: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 646 in the outer inference context.

2020-08-17 08:52:37.703481: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 624 in the outer inference context.

2020-08-17 08:52:37.703574: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 591 in the outer inference context.

2020-08-17 08:52:37.703626: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 458 in the outer inference context.

2020-08-17 08:52:37.703685: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 613 in the outer inference context.

2020-08-17 08:52:37.703734: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 503 in the outer inference context.

2020-08-17 08:52:37.703775: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 480 in the outer inference context.

2020-08-17 08:52:37.703818: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 434 in the outer inference context.

2020-08-17 08:52:37.703861: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 635 in the outer inference context.

2020-08-17 08:52:37.703912: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 559 in the outer inference context.

2020-08-17 08:52:37.703991: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 581 in the outer inference context.

2020-08-17 08:52:37.704070: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 602 in the outer inference context.

2020-08-17 08:52:37.704126: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 233 in the outer inference context.

2020-08-17 08:52:37.704178: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 492 in the outer inference context.

2020-08-17 08:52:37.704219: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 469 in the outer inference context.

2020-08-17 08:52:37.704263: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 423 in the outer inference context.

2020-08-17 08:52:37.704341: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 445 in the outer inference context.

2020-08-17 08:52:37.704422: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 267 in the outer inference context.

2020-08-17 08:52:37.704466: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 187 in the outer inference context.

2020-08-17 08:52:37.704511: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 413 in the outer inference context.

2020-08-17 08:52:37.704553: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 524 in the outer inference context.

2020-08-17 08:52:37.704605: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 288 in the outer inference context.

2020-08-17 08:52:37.704684: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 244 in the outer inference context.

2020-08-17 08:52:37.704736: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 177 in the outer inference context.

2020-08-17 08:52:37.704775: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 155 in the outer inference context.

2020-08-17 08:52:37.704813: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 132 in the outer inference context.

2020-08-17 08:52:37.704893: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 334 in the outer inference context.

2020-08-17 08:52:37.704953: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 256 in the outer inference context.

2020-08-17 08:52:37.705015: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 108 in the outer inference context.

2020-08-17 08:52:37.705067: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 222 in the outer inference context.

2020-08-17 08:52:37.705108: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 198 in the outer inference context.

2020-08-17 08:52:37.705207: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 166 in the outer inference context.

2020-08-17 08:52:37.705271: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 121 in the outer inference context.

2020-08-17 08:52:37.705344: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 143 in the outer inference context.

2020-08-17 08:52:37.705487: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 97 in the outer inference context.

2020-08-17 08:52:37.705575: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 278 in the outer inference context.

2020-08-17 08:52:37.705617: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 379 in the outer inference context.

2020-08-17 08:52:37.705656: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 357 in the outer inference context.

2020-08-17 08:52:37.705702: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 402 in the outer inference context.

2020-08-17 08:52:37.705778: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 310 in the outer inference context.

2020-08-17 08:52:37.705879: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 368 in the outer inference context.

2020-08-17 08:52:37.705923: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 345 in the outer inference context.

2020-08-17 08:52:37.705962: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 323 in the outer inference context.

2020-08-17 08:52:37.706006: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 391 in the outer inference context.

2020-08-17 08:52:37.706069: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 299 in the outer inference context.

2020-08-17 08:52:37.706123: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 76 in the outer inference context.

2020-08-17 08:52:37.706174: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 209 in the outer inference context.

2020-08-17 08:52:37.706248: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 86 in the outer inference context.

2020-08-17 08:52:38.032315: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 469 in the outer inference context.

2020-08-17 08:52:38.032465: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 602 in the outer inference context.

2020-08-17 08:52:38.032522: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 546 in the outer inference context.

2020-08-17 08:52:38.032564: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 524 in the outer inference context.

2020-08-17 08:52:38.032623: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 624 in the outer inference context.

2020-08-17 08:52:38.032671: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 570 in the outer inference context.

2020-08-17 08:52:38.032735: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 514 in the outer inference context.

2020-08-17 08:52:38.032777: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 492 in the outer inference context.

2020-08-17 08:52:38.032823: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 445 in the outer inference context.

2020-08-17 08:52:38.032863: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 423 in the outer inference context.

2020-08-17 08:52:38.032906: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 76 in the outer inference context.

2020-08-17 08:52:38.032985: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 402 in the outer inference context.

2020-08-17 08:52:38.033046: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 379 in the outer inference context.

2020-08-17 08:52:38.033146: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 299 in the outer inference context.

2020-08-17 08:52:38.033218: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 368 in the outer inference context.

2020-08-17 08:52:38.033270: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 323 in the outer inference context.

2020-08-17 08:52:38.033318: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 267 in the outer inference context.

2020-08-17 08:52:38.033354: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 256 in the outer inference context.

2020-08-17 08:52:38.033394: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 413 in the outer inference context.

2020-08-17 08:52:38.033464: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 209 in the outer inference context.

2020-08-17 08:52:38.033521: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 391 in the outer inference context.

2020-08-17 08:52:38.033570: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 345 in the outer inference context.

2020-08-17 08:52:38.033623: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 233 in the outer inference context.

2020-08-17 08:52:38.033728: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 288 in the outer inference context.

2020-08-17 08:52:38.033803: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 310 in the outer inference context.

2020-08-17 08:52:38.033896: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 244 in the outer inference context.

2020-08-17 08:52:38.033941: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 222 in the outer inference context.

2020-08-17 08:52:38.033977: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 357 in the outer inference context.

2020-08-17 08:52:38.034031: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 278 in the outer inference context.

2020-08-17 08:52:38.034085: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 334 in the outer inference context.

2020-08-17 08:52:38.034120: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 198 in the outer inference context.

2020-08-17 08:52:38.034224: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 177 in the outer inference context.

2020-08-17 08:52:38.034332: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 121 in the outer inference context.

2020-08-17 08:52:38.034407: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 143 in the outer inference context.

2020-08-17 08:52:38.034463: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 166 in the outer inference context.

2020-08-17 08:52:38.034521: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 155 in the outer inference context.

2020-08-17 08:52:38.034587: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 108 in the outer inference context.

2020-08-17 08:52:38.034639: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 132 in the outer inference context.

2020-08-17 08:52:38.034678: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 187 in the outer inference context.

2020-08-17 08:52:38.034768: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 97 in the outer inference context.

2020-08-17 08:52:38.034832: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 86 in the outer inference context.

2020-08-17 08:52:38.034952: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 559 in the outer inference context.

2020-08-17 08:52:38.035006: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 646 in the outer inference context.

2020-08-17 08:52:38.035061: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 535 in the outer inference context.

2020-08-17 08:52:38.035144: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 613 in the outer inference context.

2020-08-17 08:52:38.035188: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 591 in the outer inference context.

2020-08-17 08:52:38.035234: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 458 in the outer inference context.

2020-08-17 08:52:38.035278: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 635 in the outer inference context.

2020-08-17 08:52:38.035322: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 581 in the outer inference context.

2020-08-17 08:52:38.035364: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 480 in the outer inference context.

2020-08-17 08:52:38.035432: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 503 in the outer inference context.

2020-08-17 08:52:38.035483: W tensorflow/core/common\_runtime/shape\_refiner.cc:88] Function instantiation has undefined input shape at index: 434 in the outer inference context.

2020-08-17 08:52:39.204912: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcublas.so.9.0

2020-08-17 08:52:39.469481: I tensorflow/stream\_executor/platform/default/dso\_loader.cc:44] Successfully opened dynamic library libcudnn.so.7

2020-08-17 08:52:40.263930: 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: 6.1127 - categorical\_accuracy: 0.0000e+00/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

198/487 [===========>..................] - ETA: 54:44 - loss: 3.5208 - categorical\_accuracy: 0.4448/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.

239/487 [=============>................] - ETA: 48:04 - loss: 3.3790 - categorical\_accuracy: 0.4789/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.

251/487 [==============>...............] - ETA: 45:54 - loss: 3.3396 - categorical\_accuracy: 0.4879/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

255/487 [==============>...............] - ETA: 45:08 - loss: 3.3299 - categorical\_accuracy: 0.4906/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.

487/487 [==============================] - ETA: 0s - loss: 2.9014 - categorical\_accuracy: 0.5773 W0817 10:30:46.321264 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function Model.make\_test\_function.<locals>.test\_function at 0x2aab97a2bb70> 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

W0817 10:55:10.245892 46912496467904 callbacks.py:1203] Can save best model only with val\_acc available, sk487/487 [==============================] - 7349s 15s/step - loss: 2.9014 - categorical\_accuracy: 0.5773 - val\_loss: 2.0436 - val\_categorical\_accuracy: 0.7445 - lr: 0.0050

Epoch 2/10

487/487 [==============================] - ETA: 0s - loss: 2.0726 - categorical\_accuracy: 0.7221 W0817 12:5487/487 [==============================] - 7281s 15s/step - loss: 2.0726 - categorical\_accuracy: 0.7221 - val\_loss: 1.9302 - val\_categorical\_accuracy: 0.7614 - lr: 0.0050

Epoch 3/10

487/487 [==============================] - ETA: 0s - loss: 1.9642 - categorical\_accuracy: 0.7447 W0817 14:5487/487 [==============================] - 6939s 14s/step - loss: 1.9642 - categorical\_accuracy: 0.7447 - val\_loss: 1.8977 - val\_categorical\_accuracy: 0.7712 - lr: 0.0050

Epoch 4/10

487/487 [==============================] - ETA: 0s - loss: 1.9123 - categorical\_accuracy: 0.7623W0817 16:34487/487 [==============================] - 6162s 13s/step - loss: 1.9123 - categorical\_accuracy: 0.7623 - val\_loss: 1.8998 - val\_categorical\_accuracy: 0.7726 - lr: 0.0050

Epoch 5/10

487/487 [==============================] - ETA: 0s - loss: 1.8734 - categorical\_accuracy: 0.7728W0817 18:06487/487 [==============================] - 5474s 11s/step - loss: 1.8734 - categorical\_accuracy: 0.7728 - val\_loss: 1.8850 - val\_categorical\_accuracy: 0.7814 - lr: 0.0050

Epoch 6/10

487/487 [==============================] - ETA: 0s - loss: 1.8401 - categorical\_accuracy: 0.7837W0817 19:32487/487 [==============================] - 5202s 11s/step - loss: 1.8401 - categorical\_accuracy: 0.7837 - val\_loss: 1.8757 - val\_categorical\_accuracy: 0.7823 - lr: 0.0050

Epoch 7/10

487/487 [==============================] - ETA: 0s - loss: 1.8387 - categorical\_accuracy: 0.7856

Epoch 00007: ReduceLROnPlateau reducing learning rate to 0.0009999999776482583.

W0817 21:04:21.924692 46912496467904 callbacks.py:1203] Can save best model only with val\_acc available, sk487/487 [==============================] - 5493s 11s/step - loss: 1.8387 - categorical\_accuracy: 0.7856 - val\_loss: 1.8846 - val\_categorical\_accuracy: 0.7812 - lr: 0.0050

Epoch 8/10

487/487 [==============================] - ETA: 0s - loss: 1.7696 - categorical\_accuracy: 0.8038W0817 22:35487/487 [==============================] - 5491s 11s/step - loss: 1.7696 - categorical\_accuracy: 0.8038 - val\_loss: 1.8124 - val\_categorical\_accuracy: 0.7945 - lr: 1.0000e-03

Epoch 9/10

487/487 [==============================] - ETA: 0s - loss: 1.6861 - categorical\_accuracy: 0.8280W0818 00:03487/487 [==============================] - 5232s 11s/step - loss: 1.6861 - categorical\_accuracy: 0.8280 - val\_loss: 1.7923 - val\_categorical\_accuracy: 0.7999 - lr: 1.0000e-03

Epoch 10/10

487/487 [==============================] - ETA: 0s - loss: 1.6628 - categorical\_accuracy: 0.8345W0818 01:27487/487 [==============================] - 5083s 10s/step - loss: 1.6628 - categorical\_accuracy: 0.8345 - val\_loss: 1.7784 - val\_categorical\_accuracy: 0.8050 - lr: 1.0000e-03

2020-08-18 01:27:50.340897: 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.

W0818 01:27:50.368425 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function canonicalize\_signatures.<locals>.signature\_wrapper at 0x2aab97e48510> 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

W0818 01:27:51.976636 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function KerasLayer.\_call\_loss\_if\_trainable.<locals>.<lambda> at 0x2aab5f13eea0> 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

W0818 01:27:52.014083 46912496467904 ag\_logging.py:146] AutoGraph could not transform <function Layer.\_handle\_weight\_regularization.<locals>.\_loss\_for\_variable at 0x2aab5f7147b8> 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

W0818 01:27:52.346323 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.