HOW INFO: Initializing network whitening

>> Initializing dim reduction

/usr/local/lib/python3.7/dist-packages/torch/utils/data/dataloader.py:481: UserWarning: This DataLoader will create 6 worker processes in total. Our suggested max number of worker in current system is 2, which is smaller than what this DataLoader is going to create. Please be aware that excessive worker creation might get DataLoader running slow or even freeze, lower the worker number to avoid potential slowness/freeze if necessary.

cpuset\_checked))

/usr/local/lib/python3.7/dist-packages/torch/nn/functional.py:718: UserWarning: Named tensors and all their associated APIs are an experimental feature and subject to change. Please do not use them for anything important until they are released as stable. (Triggered internally at /pytorch/c10/core/TensorImpl.h:1156.)

return torch.max\_pool2d(input, kernel\_size, stride, padding, dilation, ceil\_mode)

>>>> 1885/1885 done...

tcmalloc: large alloc 2841313280 bytes == 0x55aeb5e6a000 @ 0x7f44485251e7 0x7f43eb92846e 0x7f43eb978c7b 0x7f43eb978d18 0x7f43eba20010 0x7f43eba2073c 0x7f43eba2085d 0x55ad72af7f68 0x7f43eb965ef7 0x55ad72af5c47 0x55ad72af5a50 0x55ad72b69453 0x55ad72b644ae 0x55ad72af73ea 0x55ad72b697f0 0x55ad72a36d14 0x7f43eb965ef7 0x55ad72af5c47 0x55ad72af5a50 0x55ad72b69453 0x55ad72b644ae 0x55ad72af73ea 0x55ad72b697f0 0x55ad72b647ad 0x55ad72af73ea 0x55ad72b6632a 0x55ad72b647ad 0x55ad72a36e2c 0x55ad72b66bb5 0x55ad72b644ae 0x55ad72a36e2c

tcmalloc: large alloc 2841313280 bytes == 0x55af5f41a000 @ 0x7f44485251e7 0x7f43eb92846e 0x7f43eb978c7b 0x7f43eb978d18 0x7f43eba34d79 0x7f43eba37e4c 0x7f43ebb56e7f 0x7f43ebb5cfb5 0x7f43ebb5ee3d 0x7f43ebb60516 0x55ad72af6f30 0x55ad72af6b09 0x7f43eba3f0db 0x55ad72bdf252 0x55ad72b660d2 0x55ad72b644ae 0x55ad72af73ea 0x55ad72b697f0 0x55ad72af730a 0x55ad72b697f0 0x55ad72b644ae 0x55ad72a36e2c 0x55ad72b66bb5 0x55ad72b644ae 0x55ad72a36e2c 0x55ad72b66bb5 0x55ad72af730a 0x55ad72b653b5 0x55ad72b644ae 0x55ad72b641b3 0x55ad72c2e182

changed retrieval-SfM-120k => mitsubishi\_dataset

#######check loaded content######

scores : {'global\_descriptor': defaultdict(<class 'list'>, {}), 'local\_descriptor': defaultdict(<class 'list'>, {}), 'train\_loss': [(1, 0.222818398039788), (2, 0.10378619345836342), (3, 0.06189663992577698), (4, 0.04006348572089337), (5, 0.021295666891150176), (6, 0.013496961122844368), (7, 0.00987832142226398), (8, 0.007607022781623528), (9, 0.006161538298561936), (10, 0.004728799684060505), (11, 0.003980073045298923), (12, 0.003172640458898968), (13, 0.0028241200090560596), (14, 0.0023239940144267166), (15, 0.0019118975398741895)]}

net\_params : {'architecture': 'resnet18', 'pretrained': True, 'skip\_layer': 0, 'dim\_reduction': {'dim': 128}, 'smoothing': {'kernel\_size': 3}, 'runtime': {'mean\_std': [[0.485, 0.456, 0.406], [0.229, 0.224, 0.225]], 'image\_size': 1024, 'features\_num': 1000, 'scales': [2.0, 1.414, 1.0, 0.707, 0.5, 0.353, 0.25], 'training\_scales': [1]}}

losslogger : 0.0019118975398741895

######loaded at 16#######

HOW INFO: Starting asmk evaluation

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

>>>> 1885/1885 done...

WARNING clustering 1387360 points to 65536 centroids: please provide at least 2555904 training points

HOW INFO: Codebook trained in 106.0s

HOW INFO: Evaluating 'val\_eccv20'

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

/usr/local/lib/python3.7/dist-packages/torch/nn/functional.py:3658: UserWarning: The default behavior for interpolate/upsample with float scale\_factor changed in 1.6.0 to align with other frameworks/libraries, and now uses scale\_factor directly, instead of relying on the computed output size. If you wish to restore the old behavior, please set recompute\_scale\_factor=True. See the documentation of nn.Upsample for details.

"The default behavior for interpolate/upsample with float scale\_factor changed "

>>>> 1885/1885 done...

HOW INFO: Indexed images in 45.39s

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

[W pthreadpool-cpp.cc:90] Warning: Leaking Caffe2 thread-pool after fork. (function pthreadpool)

>>>> 980/980 done...

HOW INFO: Evaluated val\_eccv20: mAP 14.34, mP@k [43.37 22.61 16.66]

HOW INFO: Finished asmk evaluation in 14 min

#######check saved content######

scores : {'global\_descriptor': defaultdict(<class 'list'>, {}), 'local\_descriptor': defaultdict(<class 'list'>, {'val\_eccv20': [(15, 0.14339042630555954)]}), 'train\_loss': [(1, 0.222818398039788), (2, 0.10378619345836342), (3, 0.06189663992577698), (4, 0.04006348572089337), (5, 0.021295666891150176), (6, 0.013496961122844368), (7, 0.00987832142226398), (8, 0.007607022781623528), (9, 0.006161538298561936), (10, 0.004728799684060505), (11, 0.003980073045298923), (12, 0.003172640458898968), (13, 0.0028241200090560596), (14, 0.0023239940144267166), (15, 0.0019118975398741895)]}

net\_params : {'architecture': 'resnet18', 'pretrained': True, 'skip\_layer': 0, 'dim\_reduction': {'dim': 128}, 'smoothing': {'kernel\_size': 3}, 'runtime': {'mean\_std': [[0.485, 0.456, 0.406], [0.229, 0.224, 0.225]], 'image\_size': 1024, 'features\_num': 1000, 'scales': [2.0, 1.414, 1.0, 0.707, 0.5, 0.353, 0.25], 'training\_scales': [1]}}

losslogger : 0.0019118975398741895

scheduler : <torch.optim.lr\_scheduler.ExponentialLR object at 0x7f43be28ff10>

######saved after 15#######