```
1 "C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\python.exe" E:/Thomas/one-man-rps/
   prototype-scripts/src/train_network_generators.py
 2 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorflow\python\
   framework\dtypes.py:516: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is deprecated
   ; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'. _np_qint8 = np.dtype([("qint8", np.int8, 1)])
 4 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorflow\python\
   framework\dtypes.py:517: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is deprecated
   ; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
      _np_quint8 = np.dtype([("quint8", np.uint8, 1)])
 6 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorflow\python\
   framework\dtypes.py:518: FutureWarning: Passing (type, 1) or 'ltype' as a synonym of type is deprecated; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
     _np_qint16 = np.dtype([("qint16", np.int16, 1)])
 8 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorflow\python\
   framework\dtypes.py:519: FutureWarning: Passing (type, 1) or 'ltype' as a synonym of type is deprecated; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
     _np_quint16 = np.dtype([("quint16", np.uint16, 1)])
10 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorflow\python\
   framework\dtypes.py:520: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is deprecated
   ; in a future version of numpy, it will be understood as (type, (1,)) / (1,)type'.
     _np_qint32 = np.dtype([("qint32", np.int32, 1)])
12 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorflow\python\
   framework\dtypes.py:525: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is deprecated
   ; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
     np_resource = np.dtype([("resource", np.ubyte, 1)])
14 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorboard\compat\
   tensorflow_stub\dtypes.py:541: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is
   deprecated; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
    _np_qint8 = np.dtype([("qint8", np.int8, 1)])
16 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorboard\compat\
   tensorflow_stub\dtypes.py:542: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is
   deprecated; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'
     _np_quint8 = np.dtype([("quint8", np.uint8, 1)])
18 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorboard\compat\
   tensorflow_stub\dtypes.py:543: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is deprecated; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
      .
_np_qint16 = np.dtype([("qint16", np.int16, 1)])
20 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorboard\compat\
   tensorflow_stub\dtypes.py:544: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is deprecated; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
     _np_quint16 = np.dtype([("quint16", np.uint16, 1)])
22 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorboard\compat\
   tensorflow_stub\dtypes.py:545: FutureWarning: Passing (type, 1) or 'ltype' as a synonym of type is deprecated; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
      _np_qint32 = np.dtype([("qint32", np.int32, 1)])
24 C:\Users\Thomas Lienbacher\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorboard\compat\
   tensorflow_stub\dtypes.py:550: FutureWarning: Passing (type, 1) or '1type' as a synonym of type is
   deprecated; in a future version of numpy, it will be understood as (type, (1,)) / '(1,)type'.
     np_resource = np.dtype([("resource", np.ubyte, 1)])
26 Working in: E:/Thomas/one-man-rps/data
27 batch size 80
28 epochs 21
29 steps per epoch 168.0
30 class names ['empty' 'paper' 'rock' 'scissors']
31 Found 40208 images belonging to 4 classes.
32 Found 19808 images belonging to 4 classes.
33 WARNING: Logging before flag parsing goes to stderr.
34 W0301 13:50:58.659435 17316 deprecation.py:506] From C:\Users\Thomas Lienbacher\AppData\Local\Programs\
   Python\Python37\lib\site-packages\tensorflow\python\ops\init_ops.py:1251: calling VarianceScaling.
     _init__ (from tensorflow.python.ops.init_ops) with dtype is deprecated and will be removed in a future
   version.
35 Instructions for updating:
36 Call initializer instance with the dtype argument instead of passing it to the constructor
37 2020-03-01 13:50:58.853588: I tensorflow/core/platform/cpu_feature_guard.cc:142] Your CPU supports
   instructions that this TensorFlow binary was not compiled to use: AVX2
38 Epoch 1/21
39
     40
Д1
42
43
     4/168 [.....] - ETA: 2:14 - loss: 1.3791 - acc: 0.2625
     5/168 [.....] - ETA: 2:07 - loss: 1.3841 - acc: 0.2525
44
     6/168 [>.....] - ETA: 2:02 - loss: 1.3821 - acc: 0.2562
7/168 [>.....] - ETA: 1:58 - loss: 1.3852 - acc: 0.2554
45
46
     8/168 [>.....] - ETA: 1:55 - loss: 1.3832 - acc: 0.2547
47
48
     9/168 [>.....] - ETA: 1:53 - loss: 1.3814 - acc: 0.2667
```

riie - i	Kun train_i	network_generators
49	10/168	[>] - ETA: 1:51 - loss: 1.3846 - acc: 0.2625
		[>] - ETA: 1:49 - loss: 1.3837 - acc: 0.2659
		[=>] - ETA: 1:47 - loss: 1.3842 - acc: 0.2635
1	-	
		[=> = c: 0.2606
53	14/168	[=>] - ETA: 1:45 - loss: 1.3844 - acc: 0.2571
54	15/168	[=>] - ETA: 1:43 - loss: 1.3841 - acc: 0.2600
55		[=>] - ETA: 1:42 - loss: 1.3841 - acc: 0.2586
		[==>] - ETA: 1:41 - loss: 1.3836 - acc: 0.2632
		[==>] - ETA: 1:40 - loss: 1.3836 - acc: 0.2639
58		[==>
59	20/168	[==>] - ETA: 1:38 - loss: 1.3827 - acc: 0.2688
60	21/168	[==>] - ETA: 1:37 - loss: 1.3823 - acc: 0.2720
		[==>] - ETA: 1:36 - loss: 1.3827 - acc: 0.2665
		[===>] - ETA: 1:35 - loss: 1.3831 - acc: 0.2641
		[===>] - ETA: 1:35 - loss: 1.3826 - acc: 0.2641
64		[===> = eTA: 1:34 - loss: 1.3821 - acc: 0.2640
65	26/168	[===>] - ETA: 1:33 - loss: 1.3816 - acc: 0.2635
66	27/168	[===>] - ETA: 1:32 - loss: 1.3810 - acc: 0.2630
		[====>] - ETA: 1:31 - loss: 1.3802 - acc: 0.2621
		[====>] - ETA: 1:30 - loss: 1.3795 - acc: 0.2634
69		[====> = ec: 0.2700
		[====>] - ETA: 1:29 - loss: 1.3776 - acc: 0.2730
71	32/168	[====>] - ETA: 1:28 - loss: 1.3764 - acc: 0.2719
		[====>] - ETA: 1:27 - loss: 1.3751 - acc: 0.2686
		[====>] - ETA: 1:27 - loss: 1.3735 - acc: 0.2776
74		[====>] - ETA: 1:26 - loss: 1.3710 - acc: 0.2814
75		[=====>] - ETA: 1:25 - loss: 1.3725 - acc: 0.2778
		[=====>] - ETA: 1:24 - loss: 1.3698 - acc: 0.2828
77	38/168	[====>] - ETA: 1:24 - loss: 1.3679 - acc: 0.2891
78		[=====>] - ETA: 1:23 - loss: 1.3659 - acc: 0.2974
79		[=====>] - ETA: 1:22 - loss: 1.3643 - acc: 0.2969
		[=====>] - ETA: 1:21 - loss: 1.3619 - acc: 0.2982
81	42/168	[=====>] - ETA: 1:21 - loss: 1.3597 - acc: 0.3051
82	43/168	[=====>] - ETA: 1:20 - loss: 1.3570 - acc: 0.3125
		[=====>] - ETA: 1:19 - loss: 1.3553 - acc: 0.3094
84		[======>] - ETA: 1:19 - loss: 1.3524 - acc: 0.3131
85		[======>] - ETA: 1:18 - loss: 1.3500 - acc: 0.3168
86		[======>] - ETA: 1:17 - loss: 1.3467 - acc: 0.3202
87	48/168	[======>] - ETA: 1:16 - loss: 1.3457 - acc: 0.3180
88	49/168	[======>] - ETA: 1:16 - loss: 1.3424 - acc: 0.3222
89		[======>] - ETA: 1:15 - loss: 1.3397 - acc: 0.3260
90		[======>] - ETA: 1:14 - loss: 1.3363 - acc: 0.3304
91		[======>] - ETA: 1:14 - loss: 1.3328 - acc: 0.3317
92		[======>] - ETA: 1:13 - loss: 1.3286 - acc: 0.3351
93	54/168	[======>] - ETA: 1:12 - loss: 1.3248 - acc: 0.3382
94	55/168	[======>] - ETA: 1:12 - loss: 1.3206 - acc: 0.3409
95		[=======>] - ETA: 1:11 - loss: 1.3165 - acc: 0.3438
96		[=======>] - ETA: 1:10 - loss: 1.3133 - acc: 0.3469
97		[=======>] - ETA: 1:10 - loss: 1.3130 - acc: 0.3472
98		[=======>] - ETA: 1:09 - loss: 1.3107 - acc: 0.3487
99		[======>] - ETA: 1:08 - loss: 1.3060 - acc: 0.3523
100	61/168	[=======>] - ETA: 1:08 - loss: 1.3023 - acc: 0.3549
101	62/168	[=======>] - ETA: 1:07 - loss: 1.2997 - acc: 0.3567
102		[=======>] - ETA: 1:06 - loss: 1.2956 - acc: 0.3591
103		[=======>] - ETA: 1:06 - loss: 1.2917 - acc: 0.3607
104		[=======>] - ETA: 1:00 - t033: 1:2517 - acc: 0:3607
105		[=======>] - ETA: 1:04 - loss: 1.2849 - acc: 0.3644
106		[=======>] - ETA: 1:04 - loss: 1.2826 - acc: 0.3660
107		[=======>] - ETA: 1:03 - loss: 1.2798 - acc: 0.3673
108		[========>] - ETA: 1:02 - loss: 1.2758 - acc: 0.3696
109		[========>] - ETA: 1:02 - loss: 1.2710 - acc: 0.3711
110		[========>] - ETA: 1:01 - loss: 1.2682 - acc: 0.3710
111		[========>] - ETA: 1:00 - loss: 1.2639 - acc: 0.3724
112		[=======>] - ETA: 1:00 - loss: 1.2596 - acc: 0.3743
113	74/168	[=======>] - ETA: 59s - loss: 1.2551 - acc: 0.3762
114	75/168	[=======>] - ETA: 58s - loss: 1.2508 - acc: 0.3783
115		[========>] - ETA: 58s - loss: 1.2459 - acc: 0.3796
116		[========>] - ETA: 57s - loss: 1.2421 - acc: 0.3818
117		[========>] - ETA: 57s - loss: 1.2369 - acc: 0.3843
118		[=======>] - ETA: 56s - loss: 1.2342 - acc: 0.3853
119	80/168	[=======>] - ETA: 55s - loss: 1.2321 - acc: 0.3862
120		[=======>] - ETA: 55s - loss: 1.2293 - acc: 0.3875
121		[========>] - ETA: 54s - loss: 1.2252 - acc: 0.3896
		[=========>] - ETA: 53s - loss: 1.2220 - acc: 0.3908
123		[========>] - ETA: 53s - loss: 1.2184 - acc: 0.3920
124		[=====================================
125	86/168	[========>] - ETA: 51s - loss: 1.2120 - acc: 0.3956

```
87/168 [=======>:...] - ETA: 51s - loss: 1.2094 - acc: 0.3958
126
 88/168 [========>:....] - ETA: 50s - loss: 1.2059 - acc: 0.3976
 89/168 [========>....] - ETA: 49s - loss: 1.2014 - acc: 0.4000
128
 90/168 [=======>>....] - ETA: 49s - loss: 1.1991 - acc: 0.4000
 91/168 [========>....] - ETA: 48s - loss: 1.1971 - acc: 0.4001
130
131 92/168 [===========>.....] - ETA: 47s - loss: 1.1928 - acc: 0.4018
132 93/168 [=========>.....] - ETA: 47s - loss: 1.1892 - acc: 0.4043
135
139 100/168 [========>....] - ETA: 42s - loss: 1.1696 - acc: 0.4148
143 104/168 [==========>.....] - ETA: 40s - loss: 1.1586 - acc: 0.4203
156 117/168 [===========>....] - ETA: 31s - loss: 1.1277 - acc: 0.4347
159 120/168 [============>....] - ETA: 30s - loss: 1.1228 - acc: 0.4364
166 127/168 [==============>.....] - ETA: 25s - loss: 1.1087 - acc: 0.4423
167 128/168 [=============>.....] - ETA: 25s - loss: 1.1069 - acc: 0.4437
```

```
- val_acc: 0.5851
208 Epoch 2/21
209
     210
211
212
     213
214
      6/168 [>.....] - ETA: 1:36 - loss: 0.8548 - acc: 0.5625
215
     7/168 [>.....] - ETA: 1:35 - loss: 0.8549 - acc: 0.5571
8/168 [>.....] - ETA: 1:35 - loss: 0.8504 - acc: 0.5641
216
217
    9/168 [>.....] - ETA: 1:34 - loss: 0.8349 - acc: 0.5819
10/168 [>.....] - ETA: 1:34 - loss: 0.8294 - acc: 0.5875
218
219
    11/168 [>.....] - ETA: 1:33 - loss: 0.8276 - acc: 0.5977 12/168 [=>.....] - ETA: 1:33 - loss: 0.8262 - acc: 0.6000
220
221
14/168 [=>.....] - ETA: 1:32 - loss: 0.8135 - acc: 0.6071 15/168 [=>.....] - ETA: 1:31 - loss: 0.8090 - acc: 0.6150
223
224
225
    16/168 [=>.....] - ETA: 1:31 - loss: 0.7992 - acc: 0.6187
226 17/168 [==>.....] - ETA: 1:31 - loss: 0.7973 - acc: 0.6191
227 18/168 [==>.....] - ETA: 1:30 - loss: 0.7896 - acc: 0.6236
    19/168 [==>.....] - ETA: 1:30 - loss: 0.7861 - acc: 0.6309
228
    20/168 [==> . . . . ] - ETA: 1:30 - LOSS: 0.7835 - acc: 0.6306
21/168 [==> . . . . ] - ETA: 1:30 - LOSS: 0.7835 - acc: 0.6306
21/168 [==> . . . . ] - ETA: 1:30 - LOSS: 0.7847 - acc: 0.6304
22/168 [==> . . . . ] - ETA: 1:31 - LOSS: 0.7857 - acc: 0.6307
229
230
231
    23/168 [===>.....] - ETA: 1:31 - loss: 0.7923 - acc: 0.6272
232
    24/168 [===>....] - ETA: 1:32 - loss: 0.7933 - acc: 0.6255 25/168 [===>....] - ETA: 1:32 - loss: 0.7936 - acc: 0.6280
233
234
    26/168 [===>.....] - ETA: 1:32 - loss: 0.7982 - acc: 0.6269
235
    27/168 [===>. . . . ] - ETA: 1:35 - loss: 0.7983 - acc: 0.6264
28/168 [===>. . . . ] - ETA: 1:34 - loss: 0.7963 - acc: 0.6263
29/168 [===>. . . . ] - ETA: 1:34 - loss: 0.8041 - acc: 0.6216
236
237
238
    30/168 [====>.....] - ETA: 1:34 - loss: 0.8019 - acc: 0.6229
    31/168 [====>.....] - ETA: 1:34 - loss: 0.7974 - acc: 0.6262
240
    32/168 [===>.....] - ETA: 1:33 - loss: 0.7956 - acc: 0.6289
241
    33/168 [====>...] - ETA: 1:34 - loss: 0.7938 - acc: 0.6295
34/168 [====>...] - ETA: 1:33 - loss: 0.7948 - acc: 0.6309
242
243
    35/168 [=====>....] - ETA: 1:33 - loss: 0.7936 - acc: 0.6325
36/168 [====>....] - ETA: 1:33 - loss: 0.7924 - acc: 0.6344
244
245
    37/168 [====>.....] - ETA: 1:32 - loss: 0.7908 - acc: 0.6338
246
    38/168 [=====>....] - ETA: 1:32 - loss: 0.7900 - acc: 0.6332
39/168 [=====>....] - ETA: 1:32 - loss: 0.7889 - acc: 0.6340
247
248
249 40/168 [======>.....] - ETA: 1:34 - loss: 0.7860 - acc: 0.6369
250 41/168 [=====>.....] - ETA: 1:34 - loss: 0.7857 - acc: 0.6357
251 42/168 [======>....] - ETA: 1:33 - loss: 0.7816 - acc: 0.6378
252 43/168 [=====>....] - ETA: 1:32 - loss: 0.7801 - acc: 0.6392
253
   44/168 [=====>.....] - ETA: 1:32 - loss: 0.7752 - acc: 0.6432
    45/168 [======>...] - ETA: 1:31 - loss: 0.7760 - acc: 0.6439
46/168 [======>...] - ETA: 1:31 - loss: 0.7715 - acc: 0.6481
254
255
    47/168 [======>...] - ETA: 1:30 - loss: 0.7709 - acc: 0.6492
48/168 [======>...] - ETA: 1:29 - loss: 0.7679 - acc: 0.6508
256
257
    49/168 [======>....] - ETA: 1:28 - loss: 0.7652 - acc: 0.6520 50/168 [======>....] - ETA: 1:28 - loss: 0.7636 - acc: 0.6525
258
259
    51/168 [=======>.....] - ETA: 1:28 - loss: 0.7622 - acc: 0.6539
260
    52/168 [=======> ... ] - ETA: 1:27 - loss: 0.7604 - acc: 0.6543 53/168 [=======> ... ] - ETA: 1:28 - loss: 0.7590 - acc: 0.6542
261
262
    54/168 [=======>.....] - ETA: 1:27 - loss: 0.7553 - acc: 0.6565
263
    55/168 [========>....] - ETA: 1:26 - loss: 0.7532 - acc: 0.6584
56/168 [========>....] - ETA: 1:25 - loss: 0.7486 - acc: 0.6609
264
265
    57/168 [======>....] - ETA: 1:25 - loss: 0.7465 - acc: 0.6618
266
    58/168 [=======>.....] - ETA: 1:24 - loss: 0.7467 - acc: 0.6627
267
    59/168 [========>....] - ETA: 1:23 - loss: 0.7446 - acc: 0.6644 60/168 [=======>....] - ETA: 1:23 - loss: 0.7429 - acc: 0.6656
268
269
    61/168 [=======>...... ] - ETA: 1:22 - loss: 0.7420 - acc: 0.6654
270
    271
272
273
    64/168 [=======>.....] - ETA: 1:20 - loss: 0.7355 - acc: 0.6680
    65/168 [=======> .....] - ETA: 1:20 - loss: 0.7328 - acc: 0.6696
274
    66/168 [========> .....] - ETA: 1:20 - loss: 0.7318 - acc: 0.6706 67/168 [=======> .....] - ETA: 1:19 - loss: 0.7291 - acc: 0.6724
275
276
    68/168 [=======>.....] - ETA: 1:18 - loss: 0.7264 - acc: 0.6735
277
278 69/168 [=======>....] - ETA: 1:17 - loss: 0.7252 - acc: 0.6741
```

```
70/168 [=======>....] - ETA: 1:17 - loss: 0.7220 - acc: 0.6757
279
 71/168 [=========>....] - ETA: 1:15 - loss: 0.7179 - acc: 0.6771 72/168 [========>....] - ETA: 1:15 - loss: 0.7155 - acc: 0.6782
 73/168 [=======>....] - ETA: 1:14 - loss: 0.7152 - acc: 0.6784
283 74/168 [==========>....] - ETA: 1:13 - loss: 0.7134 - acc: 0.6790
284 75/168 [=========>....] - ETA: 1:12 - loss: 0.7117 - acc: 0.6801
285 76/168 [=======>.....] - ETA: 1:12 - loss: 0.7102 - acc: 0.6809
 286
287
288
289
291
 83/168 [=======>>.....] - ETA: 1:06 - loss: 0.7078 - acc: 0.6837
292
 293
294
 295
296
297
298
 90/168 [========>>.....] - ETA: 1:01 - loss: 0.7017 - acc: 0.6857
299
 300
301
 93/168 [========>....] - ETA: 59s - loss: 0.6989 - acc: 0.6871
305 96/168 [=========>....] - ETA: 57s - loss: 0.6959 - acc: 0.6892
309 100/168 [=========>....] - ETA: 54s - loss: 0.6909 - acc: 0.6918
312 103/168 [=========>....] - ETA: 52s - loss: 0.6891 - acc: 0.6938
316 107/168 [===========>....] - ETA: 48s - loss: 0.6875 - acc: 0.6951
320 111/168 [===========>....] - ETA: 45s - loss: 0.6830 - acc: 0.6981
323 114/168 [============>.....] - ETA: 43s - loss: 0.6794 - acc: 0.7002
326 117/168 [===========>....] - ETA: 41s - loss: 0.6753 - acc: 0.7028
330 121/168 [===============>.....] - ETA: 38s - loss: 0.6717 - acc: 0.7052
343 134/168 [==============>.....] - ETA: 27s - loss: 0.6626 - acc: 0.7103
```

```
- val_acc: 0.8233
378 Epoch 3/21
379
    1/168 [.....] - ETA: 1:41 - loss: 0.5590 - acc: 0.7375
380
    2/168 [.....] - ETA: 1:38 - loss: 0.5618 - acc: 0.7563
381
    3/168 [.....] - ETA: 1:36 - loss: 0.5505 - acc: 0.7708
382
   383
384
    6/168 [>.....] - ETA: 1:35 - loss: 0.5185 - acc: 0.7937
385
   386
387
   9/168 [>.....] - ETA: 1:34 - loss: 0.5032 - acc: 0.7944
388
392 13/168 [=>.....] - ETA: 1:32 - loss: 0.5088 - acc: 0.7913
393 14/168 [=> ... ... ] - ETA: 1:31 - loss: 0.5064 - acc: 0.7937
394 15/168 [=> ... ... ] - ETA: 1:30 - loss: 0.5106 - acc: 0.7883
395 16/168 [=> ... ... ] - ETA: 1:30 - loss: 0.5087 - acc: 0.7883
396 17/168 [==> ... ... ] - ETA: 1:29 - loss: 0.5103 - acc: 0.7897
   18/168 [==>.....] - ETA: 1:29 - loss: 0.5076 - acc: 0.7875
19/168 [==>.....] - ETA: 1:28 - loss: 0.5083 - acc: 0.7875
397
398
   20/168 [==>.....] - ETA: 1:27 - loss: 0.5021 - acc: 0.7912
400 21/168 [==>.....] - ETA: 1:29 - loss: 0.5033 - acc: 0.7899
401 22/168 [==>.....] - ETA: 1:31 - loss: 0.5014 - acc: 0.7909
402 23/168 [===>....] - ETA: 1:32 - loss: 0.5002 - acc: 0.7929
403 24/168 [===>....] - ETA: 1:34 - loss: 0.4963 - acc: 0.7969
   25/168 [===>....] - ETA: 1:35 - loss: 0.4920 - acc: 0.8000
26/168 [===>....] - ETA: 1:36 - loss: 0.4927 - acc: 0.8005
404
405
406
  27/168 [===>.....] - ETA: 1:36 - loss: 0.4884 - acc: 0.8032
   28/168 [====>....] - ETA: 1:37 - loss: 0.4856 - acc: 0.8036
29/168 [====>....] - ETA: 1:38 - loss: 0.4837 - acc: 0.8060
407
408
409 30/168 [====>....] - ETA: 1:38 - loss: 0.4792 - acc: 0.8071
410 31/168 [====>....] - ETA: 1:38 - loss: 0.4787 - acc: 0.8060
411 32/168 [====>....] - ETA: 1:39 - loss: 0.4784 - acc: 0.8062
412 33/168 [====>....] - ETA: 1:42 - loss: 0.4769 - acc: 0.8072
413 34/168 [=====>.....] - ETA: 1:42 - loss: 0.4843 - acc: 0.8044
   35/168 [=====>...] - ETA: 1:42 - loss: 0.4870 - acc: 0.8039
36/168 [====>...] - ETA: 1:42 - loss: 0.4898 - acc: 0.8017
414
415
416 37/168 [=====>.....] - ETA: 1:42 - loss: 0.4901 - acc: 0.8014
   38/168 [=====>....] - ETA: 1:42 - loss: 0.4916 - acc: 0.8007
39/168 [=====>....] - ETA: 1:42 - loss: 0.4962 - acc: 0.7997
417
418
419 40/168 [======>.....] - ETA: 1:42 - loss: 0.4983 - acc: 0.7972
420 41/168 [======>.....] - ETA: 1:41 - loss: 0.4976 - acc: 0.7979
421 42/168 [======>....] - ETA: 1:41 - loss: 0.4993 - acc: 0.7982
422 43/168 [=====>....] - ETA: 1:41 - loss: 0.4983 - acc: 0.7991
426 47/168 [======>.....] - ETA: 1:39 - loss: 0.4975 - acc: 0.7979
427 48/168 [======>.....] - ETA: 1:39 - loss: 0.4965 - acc: 0.7987
428 49/168 [=======>.....] - ETA: 1:39 - loss: 0.4985 - acc: 0.7972
429 50/168 [======>.....] - ETA: 1:39 - loss: 0.4989 - acc: 0.7970
430 51/168 [=======>.....] - ETA: 1:38 - loss: 0.4997 - acc: 0.7973
431 52/168 [=======>.....] - ETA: 1:38 - loss: 0.5000 - acc: 0.7966
```

```
53/168 [======>....] - ETA: 1:37 - loss: 0.4988 - acc: 0.7972
432
 54/168 [=======>....] - ETA: 1:36 - loss: 0.4972 - acc: 0.7977 55/168 [=======>....] - ETA: 1:36 - loss: 0.4971 - acc: 0.7977
433
434
 435
436
437
438 59/168 [=======>....] - ETA: 1:33 - loss: 0.4956 - acc: 0.7985
66/168 [=======>....] - ETA: 1:29 - loss: 0.4969 - acc: 0.7991
445
 67/168 [=========> . . . . . ] - ETA: 1:29 - loss: 0.4964 - acc: 0.7991 68/168 [========> . . . . ] - ETA: 1:28 - loss: 0.4948 - acc: 0.7998
446
447
 448
ЦЦ9
450
451
 73/168 [========>....] - ETA: 1:25 - loss: 0.4906 - acc: 0.8012
452
 74/168 [==========>....] - ETA: 1:24 - loss: 0.4918 - acc: 0.8008 75/168 [========>....] - ETA: 1:23 - loss: 0.4923 - acc: 0.8003
453
454
 455
456
457
458
 459
460
461
 83/168 [=======>.....] - ETA: 1:18 - loss: 0.4978 - acc: 0.7988
462
 463
464
 86/168 [========>....] - ETA: 1:16 - loss: 0.4973 - acc: 0.8001
465
476 97/168 [==========>.....] - ETA: 1:08 - loss: 0.4993 - acc: 0.7997
490 111/168 [===========>....] - ETA: 57s - loss: 0.4981 - acc: 0.8000
494 115/168 [=============>.....] - ETA: 53s - loss: 0.4981 - acc: 0.7993
496 117/168 [==========>....] - ETA: 51s - loss: 0.4978 - acc: 0.7991
497 118/168 [==============>.....] - ETA: 51s - loss: 0.4973 - acc: 0.7994
```

```
- val_acc: 0.8693
548 Epoch 4/21
549
  550
551
  552
553
554
  555
556
  557
558
 10/168 [>.....] - ETA: 1:37 - loss: 0.4417 - acc: 0.8163
559
562 13/168 [=> ... ... ] - ETA: 1:35 - loss: 0.4343 - acc: 0.8154
563 14/168 [=> ... ... ] - ETA: 1:35 - loss: 0.4414 - acc: 0.8071
564 15/168 [=> ... ... ] - ETA: 1:34 - loss: 0.4424 - acc: 0.8075
565 16/168 [=> ... ... ] - ETA: 1:34 - loss: 0.4377 - acc: 0.8075
566 17/168 [==>.....] - ETA: 1:31 - loss: 0.4284 - acc: 0.8140
567 18/168 [==>....] - ETA: 1:30 - loss: 0.4279 - acc: 0.8132
568 19/168 [==>....] - ETA: 1:30 - loss: 0.4259 - acc: 0.8165

      20/168 [==>
      ] - ETA: 1:29 - loss: 0.4290 - acc: 0.8138

      21/168 [==>
      ] - ETA: 1:29 - loss: 0.4230 - acc: 0.8174

      22/168 [==>
      ] - ETA: 1:28 - loss: 0.4252 - acc: 0.8160

570
571
 23/168 [===>....] - ETA: 1:28 - loss: 0.4259 - acc: 0.8180 24/168 [===>....] - ETA: 1:27 - loss: 0.4255 - acc: 0.8189
572
573
 25/168 [===>....] - ETA: 1:27 - loss: 0.4202 - acc: 0.8227
26/168 [===>....] - ETA: 1:26 - loss: 0.4178 - acc: 0.8232
574
575
 577
578
579 30/168 [====>....] - ETA: 1:24 - loss: 0.4146 - acc: 0.8294
580 31/168 [====>....] - ETA: 1:23 - loss: 0.4124 - acc: 0.8313
 32/168 [====>....] - ETA: 1:22 - loss: 0.4127 - acc: 0.8323
33/168 [====>....] - ETA: 1:22 - loss: 0.4124 - acc: 0.8321
581
582
 34/168 [=====>....] - ETA: 1:21 - loss: 0.4089 - acc: 0.8330
584 35/168 [=====>.....] - ETA: 1:21 - loss: 0.4076 - acc: 0.8327
```

```
36/168 [=====>.....] - ETA: 1:20 - loss: 0.4040 - acc: 0.8343
    37/168 [=====>....] - ETA: 1:20 - loss: 0.3999 - acc: 0.8374
38/168 [=====>....] - ETA: 1:19 - loss: 0.3979 - acc: 0.8378
587
591 42/168 [=====>.....] - ETA: 1:17 - loss: 0.3940 - acc: 0.8401

      42/168 [======>
      ] - ETA: 1:17 - LOSS: 0.3940 - acc: 0.8401

      43/168 [=====>
      ] - ETA: 1:16 - LOSS: 0.3916 - acc: 0.8413

      44/168 [=====>
      ] - ETA: 1:15 - LOSS: 0.3913 - acc: 0.8415

      45/168 [======>
      ] - ETA: 1:15 - LOSS: 0.3892 - acc: 0.8428

      46/168 [======>
      ] - ETA: 1:14 - LOSS: 0.3885 - acc: 0.8429

      47/168 [======>
      ] - ETA: 1:14 - LOSS: 0.3871 - acc: 0.8435

      48/168 [======>
      ] - ETA: 1:13 - LOSS: 0.3871 - acc: 0.8435

592
593
594
595
596
597
598 49/168 [======>......] - ETA: 1:12 - loss: 0.3868 - acc: 0.8444
    50/168 [======>...] - ETA: 1:12 - loss: 0.3850 - acc: 0.8450 51/168 [======>...] - ETA: 1:11 - loss: 0.3872 - acc: 0.8446
599
600
   52/168 [=======> . . . . ] - ETA: 1:11 - loss: 0.3856 - acc: 0.8452
53/168 [=======> . . . . ] - ETA: 1:10 - loss: 0.3872 - acc: 0.8439
54/168 [=======> . . . . ] - ETA: 1:09 - loss: 0.3856 - acc: 0.8454
55/168 [======= . . . . . ] - ETA: 1:09 - loss: 0.3846 - acc: 0.8462
601
602
604
    56/168 [=======>.....] - ETA: 1:08 - loss: 0.3818 - acc: 0.8478
605
    57/168 [========>....] - ETA: 1:08 - loss: 0.3803 - acc: 0.8483
58/168 [=======>....] - ETA: 1:07 - loss: 0.3801 - acc: 0.8479
606
607
   609
610
611 62/168 [========>.....] - ETA: 1:05 - loss: 0.3817 - acc: 0.8474
66/168 [=======>.....] - ETA: 1:02 - loss: 0.3783 - acc: 0.8479
    67/168 [=========> .....] - ETA: 1:02 - loss: 0.3789 - acc: 0.8474 68/168 [========> .....] - ETA: 1:01 - loss: 0.3776 - acc: 0.8480
616
617
618 69/168 [=========>.....] - ETA: 1:00 - loss: 0.3779 - acc: 0.8480
   619
620
621
622 73/168 [=========>.....] - ETA: 58s - loss: 0.3749 - acc: 0.8490
   623
624
    76/168 [=======>....] - ETA: 56s - loss: 0.3782 - acc: 0.8467
625
    77/168 [========>.....] - ETA: 56s - loss: 0.3787 - acc: 0.8463
626
    627
628
    80/168 [=======>....] - ETA: 54s - loss: 0.3782 - acc: 0.8475
630 81/168 [===========>.....] - ETA: 53s - loss: 0.3779 - acc: 0.8475
631 82/168 [=========>.....] - ETA: 52s - loss: 0.3763 - acc: 0.8479
632 83/168 [=========>.....] - ETA: 52s - loss: 0.3740 - acc: 0.8490
    84/168 [=======>....] - ETA: 51s - loss: 0.3746 - acc: 0.8485
633
   634
635
   87/168 [========>....] - ETA: 49s - loss: 0.3719 - acc: 0.8497
642
643 94/168 [=========>....] - ETA: 45s - loss: 0.3684 - acc: 0.8506
646 97/168 [==========>.....] - ETA: 43s - loss: 0.3669 - acc: 0.8511
649 100/168 [========>....] - ETA: 41s - loss: 0.3658 - acc: 0.8522
650 101/168 [==========>....] - ETA: 41s - loss: 0.3670 - acc: 0.8518
651 102/168 [===========>....] - ETA: 40s - loss: 0.3660 - acc: 0.8522 652 103/168 [===========>....] - ETA: 40s - loss: 0.3658 - acc: 0.8528
653 104/168 [==========>.....] - ETA: 39s - loss: 0.3653 - acc: 0.8532
656 107/168 [==========>.....] - ETA: 37s - loss: 0.3670 - acc: 0.8524
657 108/168 [============>....] - ETA: 36s - loss: 0.3668 - acc: 0.8526
660 111/168 [============>.....] - ETA: 35s - loss: 0.3693 - acc: 0.8517
661 112/168 [==============>.....] - ETA: 34s - loss: 0.3696 - acc: 0.8515
```

```
662 113/168 [==========>....] - ETA: 33s - loss: 0.3709 - acc: 0.8508
663 114/168 [==========>.....] - ETA: 33s - loss: 0.3714 - acc: 0.8504
665 116/168 [============>.....] - ETA: 32s - loss: 0.3730 - acc: 0.8492
672 123/168 [============>.....] - ETA: 27s - loss: 0.3710 - acc: 0.8499
2440 - val_acc: 0.8998
718 Epoch 5/21
719
 1/168 [.....] - ETA: 1:43 - loss: 0.3363 - acc: 0.8625 2/168 [.....] - ETA: 1:42 - loss: 0.3256 - acc: 0.8813
720
721
 3/168 [.....] - ETA: 1:41 - loss: 0.3241 - acc: 0.8833
722
 723
724
 6/168 [>.....] - ETA: 1:39 - loss: 0.3490 - acc: 0.8625
725
 7/168 [>.....] - ETA: 1:39 - loss: 0.3629 - acc: 0.8518
726
727
728
732 13/168 [=>.....] - ETA: 1:35 - loss: 0.3223 - acc: 0.8740
733 14/168 [=>......] - ETA: 1:34 - loss: 0.3195 - acc: 0.8777
737 18/168 [==>.....] - ETA: 1:32 - loss: 0.3096 - acc: 0.8778
```

File -	Run train_i	network_generators
738	19/168	[==>] - ETA: 1:31 - loss: 0.3068 - acc: 0.8789
739		
		[==>] - ETA: 1:31 - loss: 0.3090 - acc: 0.8788
740	21/168	[==>] - ETA: 1:30 - loss: 0.3117 - acc: 0.8774
741	22/168	[==>] - ETA: 1:29 - loss: 0.3098 - acc: 0.8784
742	23/168	[===>] - ETA: 1:29 - loss: 0.3106 - acc: 0.8793
743	24/168	[===>] - ETA: 1:28 - loss: 0.3069 - acc: 0.8813
744		[===>] - ETA: 1:28 - loss: 0.3023 - acc: 0.8835
745		[===>] - ETA: 1:20 - loss: 0.3026 - acc: 0.8841
746		[===>] - ETA: 1:26 - loss: 0.3016 - acc: 0.8847
747	28/168	[====>
748	29/168	[====>] - ETA: 1:25 - loss: 0.3008 - acc: 0.8866
749		[====>] - ETA: 1:25 - loss: 0.3024 - acc: 0.8863
750		[====>] - ETA: 1:24 - loss: 0.3020 - acc: 0.8855
751		[====>] - ETA: 1:23 - loss: 0.2991 - acc: 0.8879
1	_	[====>
753	34/168	[====>] - ETA: 1:22 - loss: 0.2966 - acc: 0.8882
754	35/168	[=====>] - ETA: 1:22 - loss: 0.2991 - acc: 0.8864
755		[====>] - ETA: 1:21 - loss: 0.3003 - acc: 0.8858
756		[=====>] - ETA: 1:20 - loss: 0.3013 - acc: 0.8851
757	_	[=====>] - ETA: 1:20 - loss: 0.2994 - acc: 0.8855
758		[=====>] - ETA: 1:19 - loss: 0.2990 - acc: 0.8859
759		[=====>] - ETA: 1:18 - loss: 0.3022 - acc: 0.8841
760		[=====>] - ETA: 1:18 - loss: 0.3012 - acc: 0.8848
761		[=====>] - ETA: 1:17 - loss: 0.3040 - acc: 0.8845
		[=====>] - ETA: 1:17 - loss: 0.3027 - acc: 0.8846
763		[=====>] - ETA: 1:17 - COSS: 0.3019 - acc: 0.8847
	-	-
764		[======>] - ETA: 1:15 - loss: 0.3019 - acc: 0.8847
765		[======>] - ETA: 1:15 - loss: 0.3020 - acc: 0.8853
766		[======>] - ETA: 1:14 - loss: 0.3018 - acc: 0.8851
767	48/168	[======>] - ETA: 1:14 - loss: 0.3029 - acc: 0.8854
768	49/168	[======>] - ETA: 1:13 - loss: 0.3025 - acc: 0.8849
769		[======>] - ETA: 1:12 - loss: 0.3014 - acc: 0.8852
770		[======>] - ETA: 1:12 - loss: 0.3025 - acc: 0.8848
771		[======>] - ETA: 1:11 - loss: 0.3033 - acc: 0.8849
1		[======>] - ETA: 1:10 - loss: 0.3043 - acc: 0.8844
773	54/168	[======>] - ETA: 1:10 - loss: 0.3054 - acc: 0.8843
774	55/168	[======>] - ETA: 1:09 - loss: 0.3065 - acc: 0.8832
775		[=======>] - ETA: 1:09 - loss: 0.3055 - acc: 0.8837
776		[=======>] - ETA: 1:08 - loss: 0.3060 - acc: 0.8831
777		[=======>] - ETA: 1:00
	_	
778		[=======>] - ETA: 1:07 - loss: 0.3066 - acc: 0.8822
779		[=======>] - ETA: 1:06 - loss: 0.3051 - acc: 0.8827
780	61/168	[=======>] - ETA: 1:06 - loss: 0.3054 - acc: 0.8830
781		[======>] - ETA: 1:05 - loss: 0.3031 - acc: 0.8841
782		[=======>] - ETA: 1:04 - loss: 0.3011 - acc: 0.8849
783		[=======>] - ETA: 1:04 - loss: 0.3011 - acc: 0.8854
784		[=======>] - ETA: 1:04 - loss: 0.3018 - acc: 0.8852
785		[=======>] - ETA: 1:02 - loss: 0.3009 - acc: 0.8858
786		[=======>] - ETA: 1:02 - loss: 0.3021 - acc: 0.8851
787		[=======>] - ETA: 1:01 - loss: 0.3034 - acc: 0.8847
788		[=======>] - ETA: 1:01 - loss: 0.3017 - acc: 0.8853
789	70/168	[=======>] - ETA: 1:00 - loss: 0.3012 - acc: 0.8855
790	71/168	[========>] - ETA: 59s - loss: 0.2999 - acc: 0.8863
791	72/168	[========>] - ETA: 59s - loss: 0.3020 - acc: 0.8849
792		[========>] - ETA: 58s - loss: 0.3009 - acc: 0.8853
793	-	[=======>] - ETA: 58s - loss: 0.3011 - acc: 0.8853
794		[========>] - ETA: 57s - loss: 0.3007 - acc: 0.8852
795		[=======>] - ETA: 56s - loss: 0.3024 - acc: 0.8847
796		[=======>] - ETA: 56s - loss: 0.3013 - acc: 0.8852
797		[=======>,] - ETA: 55s - loss: 0.3006 - acc: 0.8856
798		[========>] - ETA: 54s - loss: 0.2989 - acc: 0.8864
799		[========>] - ETA: 54s - loss: 0.2981 - acc: 0.8867
800		[========>:] - ETA: 545
801		[=====================================
1		[========>] - ETA: 52s - loss: 0.2983 - acc: 0.8867
803	84/168	[=======>] - ETA: 51s - loss: 0.2971 - acc: 0.8875
804	85/168	[=======>] - ETA: 51s - loss: 0.2956 - acc: 0.8885
805	86/168	[========>] - ETA: 50s - loss: 0.2956 - acc: 0.8884
806	87/168	[==========>] - ETA: 49s - loss: 0.2972 - acc: 0.8878
807		[========>] - ETA: 49s - loss: 0.2969 - acc: 0.8879
808		[========>] - ETA: 48s - loss: 0.2969 - acc: 0.8883
809		[========>] - ETA: 48s - loss: 0.2969 - acc: 0.8882
810		[========>: 0.8880
811	92/168	[========>] - ETA: 46s - loss: 0.2977 - acc: 0.8879
812		[=========>] - ETA: 46s - loss: 0.2969 - acc: 0.8882
813		[==========>] - ETA: 45s - loss: 0.2986 - acc: 0.8876
814		[=====================================
014	20/ TQQ	L

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96/168 [========>....] - ETA: 44s - loss: 0.2981 - acc: 0.8884
815
 97/168 [========>....] - ETA: 43s - loss: 0.2971 - acc: 0.8890
817 98/168 [=========>....] - ETA: 43s - loss: 0.2958 - acc: 0.8895
818 99/168 [========>.....] - ETA: 42s - loss: 0.2959 - acc: 0.8893
820 101/168 [==========>....] - ETA: 41s - loss: 0.2967 - acc: 0.8890
821 102/168 [==========>....] - ETA: 40s - loss: 0.2962 - acc: 0.8895
824 105/168 [==========>....] - ETA: 38s - loss: 0.2982 - acc: 0.8886
825 106/168 [========>=>....] - ETA: 38s - loss: 0.2977 - acc: 0.8889
828 109/168 [===========>.....] - ETA: 36s - loss: 0.2986 - acc: 0.8888
831 112/168 [==========>....] - ETA: 34s - loss: 0.2999 - acc: 0.8888
832 113/168 [=============>.....] - ETA: 33s - loss: 0.3005 - acc: 0.8886
834 115/168 [==========>.....] - ETA: 32s - loss: 0.3006 - acc: 0.8886
838 119/168 [==============>....] - ETA: 30s - loss: 0.3014 - acc: 0.8878
842 123/168 [==============>.....] - ETA: 27s - loss: 0.3023 - acc: 0.8875
855 136/168 [==============>.....] - ETA: 19s - loss: 0.2986 - acc: 0.8892
1824 - val_acc: 0.9352
888 Epoch 6/21
889
890
 1/168 [.....] - ETA: 1:47 - loss: 0.3359 - acc: 0.9000
```

File -	Run train_i	network_generators
891	2/160	[] - ETA: 1:45 - loss: 0.3354 - acc: 0.8750
-		
892		[] - ETA: 1:43 - loss: 0.3033 - acc: 0.8958
893	4/168	[] - ETA: 1:42 - loss: 0.2772 - acc: 0.9000
894		[] - ETA: 1:41 - loss: 0.2871 - acc: 0.9025
895	-	[>] - ETA: 1:41 - loss: 0.2898 - acc: 0.8979
896	7/168	[>] - ETA: 1:40 - loss: 0.2876 - acc: 0.8964
897	8/168	[>] - ETA: 1:39 - loss: 0.2734 - acc: 0.9031
898		[>] - ETA: 1:38 - loss: 0.2837 - acc: 0.9028
899	10/168	[>] - ETA: 1:37 - loss: 0.2747 - acc: 0.9038
900	11/168	[>
901		[=>] - ETA: 1:36 - loss: 0.2679 - acc: 0.9031
	-	-
902	-	[=>] - ETA: 1:35 - loss: 0.2598 - acc: 0.9087
903	14/168	[=>] - ETA: 1:35 - loss: 0.2631 - acc: 0.9071
904	15/168	[=>] - ETA: 1:34 - loss: 0.2588 - acc: 0.9092
905		[=>] - ETA: 1:33 - loss: 0.2591 - acc: 0.9070
906		[==>] - ETA: 1:33 - loss: 0.2607 - acc: 0.9051
907	18/168	[==>] - ETA: 1:32 - loss: 0.2569 - acc: 0.9062
908		[==>] - ETA: 1:31 - loss: 0.2774 - acc: 0.9033
909		[==>] - ETA: 1:31 - loss: 0.2760 - acc: 0.9050
910	21/168	[==>] - ETA: 1:30 - loss: 0.2756 - acc: 0.9048
911	22/168	[==>] - ETA: 1:30 - loss: 0.2759 - acc: 0.9034
912		[===>] - ETA: 1:29 - loss: 0.2743 - acc: 0.9033
913		[===>] - ETA: 1:28 - loss: 0.2727 - acc: 0.9036
914		[===>] - ETA: 1:28 - loss: 0.2740 - acc: 0.9025
915		[===>] - ETA: 1:27 - loss: 0.2739 - acc: 0.9024
916		[===>] - ETA: 1:26 - loss: 0.2732 - acc: 0.9037
917		[====>
918		[====>] - ETA: 1:25 - loss: 0.2741 - acc: 0.9022
919		[====>] - ETA: 1:25 - loss: 0.2735 - acc: 0.9025
920		[====>] - ETA: 1:24 - loss: 0.2731 - acc: 0.9028
921		[====>] - ETA: 1:23 - loss: 0.2706 - acc: 0.9035
922	33/168	[====>] - ETA: 1:23 - loss: 0.2694 - acc: 0.9038
923		[=====>] - ETA: 1:22 - loss: 0.2697 - acc: 0.9029
924		[=====>] - ETA: 1:21 - loss: 0.2682 - acc: 0.9039
925	36/168	[=====>] - ETA: 1:21 - loss: 0.2677 - acc: 0.9045
926	37/168	[====>] - ETA: 1:20 - loss: 0.2702 - acc: 0.9037
927		[=====>] - ETA: 1:20 - loss: 0.2661 - acc: 0.9049
928		[=====>] - ETA: 1:19 - loss: 0.2630 - acc: 0.9067
929	40/168	[=====>] - ETA: 1:18 - loss: 0.2629 - acc: 0.9053
930	41/168	[=====>] - ETA: 1:18 - loss: 0.2638 - acc: 0.9037
931		[=====>] - ETA: 1:17 - loss: 0.2616 - acc: 0.9048
_	-	-
932	43/168	[=====>] - ETA: 1:17 - loss: 0.2623 - acc: 0.9041
933	44/168	[=====>] - ETA: 1:16 - loss: 0.2635 - acc: 0.9040
934		[======>] - ETA: 1:16 - loss: 0.2653 - acc: 0.9022
935		[======>] - ETA: 1:15 - loss: 0.2673 - acc: 0.9016
		_
936		[======>] - ETA: 1:14 - loss: 0.2675 - acc: 0.9024
937	48/168	[======>] - ETA: 1:14 - loss: 0.2651 - acc: 0.9034
938	49/168	[======>] - ETA: 1:13 - loss: 0.2661 - acc: 0.9026
939		[======>] - ETA: 1:13 - loss: 0.2664 - acc: 0.9025
940	-	[======>] - ETA: 1:12 - loss: 0.2643 - acc: 0.9037
941		[======>] - ETA: 1:11 - loss: 0.2664 - acc: 0.9031
942	53/168	[======>] - ETA: 1:11 - loss: 0.2656 - acc: 0.9033
943		[======>] - ETA: 1:10 - loss: 0.2643 - acc: 0.9037
	-	-
944		[======>] - ETA: 1:09 - loss: 0.2657 - acc: 0.9025
945		[=======>] - ETA: 1:09 - loss: 0.2649 - acc: 0.9022
946	57/168	[=======>] - ETA: 1:08 - loss: 0.2639 - acc: 0.9026
947		[=======>] - ETA: 1:08 - loss: 0.2646 - acc: 0.9022
948	50/160	[=======>] - ETA: 1:00 - loss: 0.2632 - acc: 0.9025
	25/100	L
949	60/168	[=======>] - ETA: 1:06 - loss: 0.2654 - acc: 0.9021
950	61/168	[=======>] - ETA: 1:06 - loss: 0.2653 - acc: 0.9018
951		[=======>] - ETA: 1:05 - loss: 0.2689 - acc: 0.9012
952	02/108	[=======>] - ETA: 1:04 - loss: 0.2718 - acc: 0.9010
953		[=======>] - ETA: 1:04 - loss: 0.2714 - acc: 0.9010
954	65/168	[=======>] - ETA: 1:03 - loss: 0.2707 - acc: 0.9010
955		[=======>] - ETA: 1:03 - loss: 0.2711 - acc: 0.9011
956		
		[=======>] - ETA: 1:02 - loss: 0.2708 - acc: 0.9009
957		[=======>] - ETA: 1:01 - loss: 0.2713 - acc: 0.9013
958		[=======>] - ETA: 1:01 - loss: 0.2731 - acc: 0.9009
959		[=======>] - ETA: 1:00 - loss: 0.2736 - acc: 0.9009
960		[=======>] - ETA: 59s - loss: 0.2728 - acc: 0.9012
961		[=======>] - ETA: 59s - loss: 0.2720 - acc: 0.9016
962	73/168	[========>] - ETA: 58s - loss: 0.2719 - acc: 0.9015
963	7∐/16Ω	[=========>] - ETA: 58s - loss: 0.2702 - acc: 0.9025
964		[========>] - ETA: 57s - loss: 0.2707 - acc: 0.9025
965	76/168	[========>] - ETA: 56s - loss: 0.2697 - acc: 0.9031
966		[========>] - ETA: 56s - loss: 0.2693 - acc: 0.9034
967	19/168	[========>] - ETA: 55s - loss: 0.2690 - acc: 0.9032

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79/168 [=======>....] - ETA: 54s - loss: 0.2698 - acc: 0.9027
969
973
85/168 [=======>....] - ETA: 51s - loss: 0.2688 - acc: 0.9037
974
975
976
977
978
979
980
981
982
983
998 109/168 [===========>.....] - ETA: 36s - loss: 0.2668 - acc: 0.9054
1001 112/168 [============>....] - ETA: 34s - loss: 0.2663 - acc: 0.9050
1019 130/168 [==============>.....] - ETA: 23s - loss: 0.2606 - acc: 0.9062
```

```
1328 - val_acc: 0.9512
1058 Epoch 7/21
1059
     1060
1061
     1062
1063
     5/168 [.....] - ETA: 1:39 - loss: 0.3155 - acc: 0.8750
1064
     6/168 [>.....] - ETA: 1:38 - loss: 0.3002 - acc: 0.8854
7/168 [>.....] - ETA: 1:37 - loss: 0.2961 - acc: 0.8893
1065
1066
1067
     8/168 [>.....] - ETA: 1:37 - loss: 0.2955 - acc: 0.8938
    9/168 [>................] - ETA: 1:36 - loss: 0.2922 - acc: 0.8944
10/168 [>................] - ETA: 1:35 - loss: 0.3091 - acc: 0.8875
1068
1069
    11/168 [>.....] - ETA: 1:35 - loss: 0.3030 - acc: 0.8898
1070
    1071
1072
1073
    15/168 [=>.....] - ETA: 1:32 - loss: 0.2870 - acc: 0.8983
1074
    16/168 [=>.....] - ETA: 1:32 - loss: 0.2768 - acc: 0.9031
17/168 [==>.....] - ETA: 1:31 - loss: 0.2794 - acc: 0.9022
1075
1076
    18/168 [==>.....] - ETA: 1:31 - loss: 0.2757 - acc: 0.9035
1077
    19/168 [==>....] - ETA: 1:30 - loss: 0.2710 - acc: 0.9059
20/168 [==>....] - ETA: 1:30 - loss: 0.2688 - acc: 0.9062
21/168 [==>....] - ETA: 1:29 - loss: 0.2719 - acc: 0.9054
1078
1079
1080
    22/168 [==>.....] - ETA: 1:28 - loss: 0.2700 - acc: 0.9051
1081
    23/168 [===>.....] - ETA: 1:28 - loss: 0.2684 - acc: 0.9060
1082
    24/168 [===>. . . . . ] - ETA: 1:27 - loss: 0.2658 - acc: 0.9057
25/168 [===>. . . . ] - ETA: 1:26 - loss: 0.2668 - acc: 0.9050
26/168 [===>. . . . . ] - ETA: 1:26 - loss: 0.2622 - acc: 0.9062
1083
1084
1085
    27/168 [===>......] - ETA: 1:25 - loss: 0.2619 - acc: 0.9056
28/168 [===>.......] - ETA: 1:25 - loss: 0.2611 - acc: 0.9062
1086
1087
1088
    29/168 [====>.....] - ETA: 1:24 - loss: 0.2624 - acc: 0.9065
    30/168 [====> ... ] - ETA: 1:23 - loss: 0.2587 - acc: 0.9083 31/168 [====> ... ] - ETA: 1:23 - loss: 0.2598 - acc: 0.9077
1089
1090
    32/168 [====>....] - ETA: 1:22 - loss: 0.2580 - acc: 0.9082
1091
    33/168 [====>.....] - ETA: 1:21 - loss: 0.2569 - acc: 0.9080
1092
    34/168 [=====>....] - ETA: 1:21 - loss: 0.2559 - acc: 0.9081
35/168 [====>....] - ETA: 1:20 - loss: 0.2521 - acc: 0.9089
1093
1094
1095
    36/168 [=====>.....] - ETA: 1:20 - loss: 0.2505 - acc: 0.9094
    37/168 [=====> ... ] - ETA: 1:19 - loss: 0.2490 - acc: 0.9101
38/168 [=====> ... ] - ETA: 1:18 - loss: 0.2479 - acc: 0.9105
1096
1097
    39/168 [=====>...] - ETA: 1:18 - loss: 0.2492 - acc: 0.9087
40/168 [=====>...] - ETA: 1:17 - loss: 0.2498 - acc: 0.9087
1098
1099
    41/168 [======> . . . . . . ] - ETA: 1:17 - loss: 0.2504 - acc: 0.9082
42/168 [=====> . . . . . . ] - ETA: 1:16 - loss: 0.2515 - acc: 0.9083
1100
1101
1102
    43/168 [=====>.....] - ETA: 1:15 - loss: 0.2500 - acc: 0.9087
    44/168 [======> . . . . . . ] - ETA: 1:15 - loss: 0.2478 - acc: 0.9088 45/168 [======> . . . . . . ] - ETA: 1:14 - loss: 0.2484 - acc: 0.9081
1103
1104
    46/168 [======>.....] - ETA: 1:14 - loss: 0.2472 - acc: 0.9087
1105
    47/168 [======>.....] - ETA: 1:13 - loss: 0.2456 - acc: 0.9090
1106
    48/168 [======>.....] - ETA: 1:12 - loss: 0.2444 - acc: 0.9096
1107
    49/168 [======>.....] - ETA: 1:12 - loss: 0.2448 - acc: 0.9099
1108
    50/168 [======>....] - ETA: 1:11 - loss: 0.2444 - acc: 0.9105
1109
    51/168 [=======>....] - ETA: 1:11 - loss: 0.2480 - acc: 0.9110 52/168 [=======>....] - ETA: 1:10 - loss: 0.2475 - acc: 0.9108
1110
1111
    1112
1113
1114
    56/168 [======>....] - ETA: 1:08 - loss: 0.2468 - acc: 0.9100
1115
    57/168 [=======>....] - ETA: 1:07 - loss: 0.2463 - acc: 0.9101
1116
    58/168 [========>....] - ETA: 1:06 - loss: 0.2462 - acc: 0.9103 59/168 [=======>....] - ETA: 1:06 - loss: 0.2461 - acc: 0.9104
1117
1118
    60/168 [=======>....] - ETA: 1:05 - loss: 0.2453 - acc: 0.9106
1119
1120
    61/168 [======>.....] - ETA: 1:05 - loss: 0.2466 - acc: 0.9107
```

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62/168 [=======>.....] - ETA: 1:04 - loss: 0.2442 - acc: 0.9119
1121
 63/168 [=======>.....] - ETA: 1:03 - loss: 0.2465 - acc: 0.9105
1122
 64/168 [========>....] - ETA: 1:03 - loss: 0.2467 - acc: 0.9109
1123
 65/168 [=======>....] - ETA: 1:02 - loss: 0.2459 - acc: 0.9110
1124
 1125
1126
 68/168 [=======>....] - ETA: 1:00 - loss: 0.2431 - acc: 0.9121
1127
 1128
1129
1130
1131
1132
1133
 75/168 [========>....] - ETA: 56s - loss: 0.2395 - acc: 0.9147
1134
 1135
1136
1142
1143
 85/168 [=======>....] - ETA: 50s - loss: 0.2374 - acc: 0.9149
1144
 1145
1146
1147
 89/168 [========>>.....] - ETA: 48s - loss: 0.2364 - acc: 0.9152
1148
 1149
1150
 92/168 [=======>>.....] - ETA: 47s - loss: 0.2361 - acc: 0.9151
1151
 1152
1153
 95/168 [=========>.....] - ETA: 45s - loss: 0.2365 - acc: 0.9155
1154
 1155
1156
1157
1158 99/168 [==========>......] - ETA: 42s - loss: 0.2364 - acc: 0.9154
1162 103/168 [==========>.....] - ETA: 40s - loss: 0.2332 - acc: 0.9164
1179 120/168 [==============>.....] - ETA: 30s - loss: 0.2269 - acc: 0.9190
```

```
1022 - val_acc: 0.9630
1228 Epoch 8/21
1229
1230
    1/168 [.....] - ETA: 1:40 - loss: 0.2279 - acc: 0.9375
   1231
1232
1233
    5/168 [.....] - ETA: 1:38 - loss: 0.1748 - acc: 0.9500
1234
    6/168 [>.....] - ETA: 1:36 - loss: 0.1877 - acc: 0.9417
1235
   1236
1237
1238
1239
1240
1241
   12/168 [=>.....] - ETA: 1:34 - loss: 0.2004 - acc: 0.9323
   13/168 [=>.....] - ETA: 1:33 - loss: 0.2032 - acc: 0.9317 14/168 [=>.....] - ETA: 1:32 - loss: 0.2143 - acc: 0.9277
1242
1243
   15/168 [=>.....] - ETA: 1:32 - loss: 0.2117 - acc: 0.9292
16/168 [=>.....] - ETA: 1:31 - loss: 0.2093 - acc: 0.9297
1244
1245
   17/168 [==>.....] - ETA: 1:31 - loss: 0.2114 - acc: 0.9294
18/168 [==>.....] - ETA: 1:30 - loss: 0.2166 - acc: 0.9271
1246
1247
1248
   19/168 [==>.....] - ETA: 1:29 - loss: 0.2129 - acc: 0.9276
   20/168 [==>....] - ETA: 1:29 - loss: 0.2143 - acc: 0.9275
21/168 [==>....] - ETA: 1:28 - loss: 0.2224 - acc: 0.9244
1249
1250
   22/168 [==>....] - ETA: 1:28 - loss: 0.2195 - acc: 0.9250 23/168 [===>....] - ETA: 1:27 - loss: 0.2181 - acc: 0.9250
1251
1252
   24/168 [===>....] - ETA: 1:26 - loss: 0.2204 - acc: 0.9240 25/168 [===>....] - ETA: 1:26 - loss: 0.2197 - acc: 0.9240
1253
1254
1255
   26/168 [===>.....] - ETA: 1:25 - loss: 0.2212 - acc: 0.9231
   27/168 [===>...] - ETA: 1:24 - loss: 0.2183 - acc: 0.9241 28/168 [===>...] - ETA: 1:24 - loss: 0.2229 - acc: 0.9232
1256
1257
   29/168 [====>....] - ETA: 1:23 - loss: 0.2195 - acc: 0.9246
1258
   30/168 [====>....] - ETA: 1:23 - loss: 0.2215 - acc: 0.9229
1259
   31/168 [====>.....] - ETA: 1:22 - loss: 0.2243 - acc: 0.9214
1260
   32/168 [====>.....] - ETA: 1:22 - loss: 0.2240 - acc: 0.9219
1261
1262
   33/168 [====>.....] - ETA: 1:21 - loss: 0.2240 - acc: 0.9220
   34/168 [=====>....] - ETA: 1:20 - loss: 0.2223 - acc: 0.9232
35/168 [=====>....] - ETA: 1:20 - loss: 0.2229 - acc: 0.9229
1263
1264
   36/168 [====>.....] - ETA: 1:19 - loss: 0.2243 - acc: 0.9229
1265
   37/168 [=====> ... ] - ETA: 1:18 - loss: 0.2276 - acc: 0.9216
38/168 [=====> ... ] - ETA: 1:18 - loss: 0.2267 - acc: 0.9220
1266
1267
   39/168 [====>.....] - ETA: 1:17 - loss: 0.2291 - acc: 0.9212
1268
   40/168 [=====>.....] - ETA: 1:17 - loss: 0.2287 - acc: 0.9212
1269
   41/168 [======>....] - ETA: 1:16 - loss: 0.2252 - acc: 0.9229
42/168 [=====>....] - ETA: 1:16 - loss: 0.2260 - acc: 0.9223
1270
1271
   43/168 [=====>.....] - ETA: 1:15 - loss: 0.2265 - acc: 0.9215
1272
1273
   44/168 [=====>....] - ETA: 1:14 - loss: 0.2252 - acc: 0.9216
```

```
45/168 [======>.....] - ETA: 1:14 - loss: 0.2251 - acc: 0.9214
1274
   46/168 [======>.....] - ETA: 1:13 - loss: 0.2232 - acc: 0.9220 47/168 [======>.....] - ETA: 1:13 - loss: 0.2216 - acc: 0.9223
1275
1276
   48/168 [======>....] - ETA: 1:12 - loss: 0.2202 - acc: 0.9224
1277
   49/168 [=======> ...........] - ETA: 1:11 - loss: 0.2202 - acc: 0.9222 50/168 [=======> ............] - ETA: 1:11 - loss: 0.2196 - acc: 0.9222
1278
1279
   51/168 [======>....] - ETA: 1:10 - loss: 0.2173 - acc: 0.9233
1280

      51/168 [=======>
      ] - ETA: 1:10 - LOSS: 0.2173 - acc: 0.9233

      52/168 [======>
      ] - ETA: 1:10 - LOSS: 0.2167 - acc: 0.9238

      53/168 [======>
      ] - ETA: 1:09 - LOSS: 0.2163 - acc: 0.9241

      54/168 [=======>
      ] - ETA: 1:09 - LOSS: 0.2155 - acc: 0.9243

      55/168 [=======>
      ] - ETA: 1:08 - LOSS: 0.2159 - acc: 0.9239

      56/168 [=======>
      ] - ETA: 1:08 - LOSS: 0.2151 - acc: 0.9241

      57/168 [========>
      ] - ETA: 1:08 - LOSS: 0.2151 - acc: 0.9237

1281
1282
1283
1284
1285
1286
   58/168 [=======>....] - ETA: 1:07 - loss: 0.2153 - acc: 0.9235
1287
   59/168 [========>....] - ETA: 1:07 - loss: 0.2145 - acc: 0.9244 60/168 [=======>....] - ETA: 1:06 - loss: 0.2157 - acc: 0.9233
1288
1289
   61/168 [=======>....] - ETA: 1:06 - loss: 0.2157 - acc: 0.9227 62/168 [======>....] - ETA: 1:05 - loss: 0.2148 - acc: 0.9228
1290
1291
   1292
1293
1294
   1295
1296
1297
   68/168 [=======>>.....] - ETA: 1:02 - loss: 0.2152 - acc: 0.9222
   1298
1299
   71/168 [=======>....] - ETA: 1:01 - loss: 0.2161 - acc: 0.9213
1300
   72/168 [========>.....] - ETA: 1:00 - loss: 0.2157 - acc: 0.9215
1301
   1302
1303
   75/168 [========>....] - ETA: 59s - loss: 0.2134 - acc: 0.9223
1304
   1305
1306
   78/168 [========>.....] - ETA: 57s - loss: 0.2119 - acc: 0.9232
1307
   1308
1309
1310
   82/168 [=======>....] - ETA: 55s - loss: 0.2084 - acc: 0.9242
1311
   1312
1313
1314
   86/168 [=======>....] - ETA: 53s - loss: 0.2080 - acc: 0.9246
1315
   1316
1317
   89/168 [========>....] - ETA: 51s - loss: 0.2081 - acc: 0.9243
1318
   1319
1320
   92/168 [=======>>....] - ETA: 49s - loss: 0.2062 - acc: 0.9249
1321
   93/168 [========>>.....] - ETA: 48s - loss: 0.2067 - acc: 0.9245
1322
   1323
1324
   96/168 [========>....] - ETA: 47s - loss: 0.2058 - acc: 0.9250
1325
   1326
1327
1332 103/168 [==========>.....] - ETA: 43s - loss: 0.2043 - acc: 0.9262
1338 109/168 [==========>....] - ETA: 39s - loss: 0.2083 - acc: 0.9255
1339 110/168 [===========>.....] - ETA: 38s - loss: 0.2092 - acc: 0.9252
```

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1351 122/168 [==============>.....] - ETA: 30s - loss: 0.2110 - acc: 0.9240
1352 123/168 [==============>....] - ETA: 30s - loss: 0.2121 - acc: 0.9235
1358 129/168 [===============>.....] - ETA: 26s - loss: 0.2157 - acc: 0.9224
1003 - val_acc: 0.9618
1398 Epoch 9/21
1399
1400
  1/168 [.....] - ETA: 1:45 - loss: 0.2861 - acc: 0.9250
1401
  2/168 [.....] - ETA: 1:42 - loss: 0.2583 - acc: 0.9125
  1402
1403
  5/168 [.....] - ETA: 1:37 - loss: 0.1861 - acc: 0.9425
6/168 [>.....] - ETA: 1:36 - loss: 0.1749 - acc: 0.9438
1404
1405
  7/168 [>.....] - ETA: 1:35 - loss: 0.1800 - acc: 0.9375
8/168 [>.....] - ETA: 1:35 - loss: 0.1718 - acc: 0.9406
1406
1407
1408
  9/168 [>.....] - ETA: 1:34 - loss: 0.1798 - acc: 0.9375
  10/168 [>...............] - ETA: 1:33 - loss: 0.1795 - acc: 0.9362 11/168 [>................] - ETA: 1:32 - loss: 0.1827 - acc: 0.9352
1409
1410
  12/168 [=>.....] - ETA: 1:32 - loss: 0.1774 - acc: 0.9375
1411
  13/168 [=>.....] - ETA: 1:31 - loss: 0.1878 - acc: 0.9327 14/168 [=>.....] - ETA: 1:31 - loss: 0.1844 - acc: 0.9330
1412
1413
  15/168 [=>.....] - ETA: 1:30 - loss: 0.1801 - acc: 0.9358
1414
  16/168 [=>.....] - ETA: 1:30 - loss: 0.1831 - acc: 0.9344
1415
  17/168 [==>....] - ETA: 1:29 - loss: 0.1817 - acc: 0.9346
18/168 [==>....] - ETA: 1:28 - loss: 0.1777 - acc: 0.9347
1416
1417
1418 19/168 [==>.....] - ETA: 1:28 - loss: 0.1798 - acc: 0.9336
  20/168 [==>.....] - ETA: 1:27 - loss: 0.1777 - acc: 0.9350
21/168 [==>.....] - ETA: 1:27 - loss: 0.1756 - acc: 0.9357
1419
1420
1421
  22/168 [==>......] - ETA: 1:26 - loss: 0.1715 - acc: 0.9375
  23/168 [===>.....] - ETA: 1:26 - loss: 0.1716 - acc: 0.9370
1422
  24/168 [===>....] - ETA: 1:25 - loss: 0.1699 - acc: 0.9375
25/168 [===>....] - ETA: 1:24 - loss: 0.1698 - acc: 0.9380
1423
1424
  26/168 [===>.....] - ETA: 1:24 - loss: 0.1865 - acc: 0.9346
1425
1426
  27/168 [===>.....] - ETA: 1:23 - loss: 0.1866 - acc: 0.9338
```

File - F	Run train_n	etwork_generators			
1427	28/168	[====>]	- 1	ETA:	1:23 - loss: 0.1871 - acc: 0.9335
1428					1:22 - loss: 0.1866 - acc: 0.9345
1429					1:22 - loss: 0.1915 - acc: 0.9333
					1:21 - loss: 0.1934 - acc: 0.9323
					1:21 - loss: 0.1921 - acc: 0.9324
					1:21 - loss: 0.1924 - acc: 0.9326
1433	34/100	[- !	EIA:	1:21 - loss: 0.1926 - acc: 0.9320
					1:21 - loss: 0.1927 - acc: 0.9329
					1:21 - loss: 0.1956 - acc: 0.9312
					1:21 - loss: 0.1958 - acc: 0.9314
1437					1:20 - loss: 0.1927 - acc: 0.9326
1438	39/168	[====>]	- 1	ETA:	1:20 - loss: 0.1910 - acc: 0.9330
1439	40/168	[=====>]	- 1	ETA:	1:20 - loss: 0.1932 - acc: 0.9328
					1:20 - loss: 0.1922 - acc: 0.9335
					1:20 - loss: 0.1925 - acc: 0.9330
1442	ДЗ/168	Γ=====> 1	- 1	FTΔ·	1:20 - loss: 0.1897 - acc: 0.9343
1443					1:20 - loss: 0.1926 - acc: 0.9318
	44/100	[]		CTA.	1.10 loss 0.1020 acc. 0.9310
					1:19 - loss: 0.1924 - acc: 0.9317
					1:19 - loss: 0.1934 - acc: 0.9312
					1:19 - loss: 0.1942 - acc: 0.9311
1447					1:19 - loss: 0.1940 - acc: 0.9305
1448	49/168	[======>]	- [ETA:	1:18 - loss: 0.1921 - acc: 0.9314
1449					1:18 - loss: 0.1920 - acc: 0.9315
					1:17 - loss: 0.1915 - acc: 0.9316
					1:17 - loss: 0.1905 - acc: 0.9322
					1:17 - loss: 0.1897 - acc: 0.9314
1453					1:16 - loss: 0.1881 - acc: 0.9324
					1:16 - toss: 0.1879 - acc: 0.9324 1:16 - toss: 0.1879 - acc: 0.9318
					1:15 - loss: 0.1893 - acc: 0.9310
					1:15 - loss: 0.1881 - acc: 0.9316
					1:15 - loss: 0.1879 - acc: 0.9319
1458					1:14 - loss: 0.1888 - acc: 0.9311
1459	60/168	[=======>]	- 1	ETA:	1:14 - loss: 0.1887 - acc: 0.9310
					1:13 - loss: 0.1919 - acc: 0.9299
1461	62/168	[======>]	- 1	ETA:	1:13 - loss: 0.1933 - acc: 0.9292
1462	63/168	[======>]	- 1	ETA:	1:12 - loss: 0.1924 - acc: 0.9296
1463					1:12 - loss: 0.1927 - acc: 0.9291
1464					1:11 - loss: 0.1939 - acc: 0.9287
					1:11 - loss: 0.1942 - acc: 0.9284
1466					1:10 - loss: 0.1950 - acc: 0.9285
	60/160	[_ [ETA.	1:10 - loss: 0.1949 - acc: 0.9289
1468	69/168	[========>]	- !	EIA:	1:09 - loss: 0.1945 - acc: 0.9290
1469	70/168	[=======>]	- !	EIA:	1:09 - loss: 0.1945 - acc: 0.9282
					1:08 - loss: 0.1951 - acc: 0.9283
1471					1:07 - loss: 0.1950 - acc: 0.9283
1472					1:07 - loss: 0.1959 - acc: 0.9284
1473	74/168	[=======>]	- 1	ETA:	1:07 - loss: 0.1960 - acc: 0.9289
1474	75/168	[=======>]	- 1	ETA:	1:06 - loss: 0.1952 - acc: 0.9292
1475	76/168	[=======>]	- 1	ETA:	1:05 - loss: 0.1949 - acc: 0.9293
1476					1:05 - loss: 0.1966 - acc: 0.9287
1477					1:04 - loss: 0.1984 - acc: 0.9285
1478					1:03 - loss: 0.1995 - acc: 0.9282
1479	80/169	Γ=======>	_ ;	FTA.	1:03 - loss: 0.1986 - acc: 0.9284
1480					
					1:02 - loss: 0.1980 - acc: 0.9287
1481					1:02 - loss: 0.1981 - acc: 0.9288
					1:01 - loss: 0.1983 - acc: 0.9286
1483					1:00 - loss: 0.1981 - acc: 0.9284
1484					1:00 - loss: 0.1972 - acc: 0.9290
1485					59s - loss: 0.1974 - acc: 0.9288
1486					59s - loss: 0.1970 - acc: 0.9286
1487	88/168	[======================================	- 1	ETA:	58s - loss: 0.1969 - acc: 0.9287
1488					57s - loss: 0.1982 - acc: 0.9284
					57s - loss: 0.1977 - acc: 0.9285
1490					56s - loss: 0.1968 - acc: 0.9291
1491					56s - loss: 0.1963 - acc: 0.9293
					55s - loss: 0.1969 - acc: 0.9290
1493	24/T0g	[]	- !	CIA:	54s - loss: 0.1969 - acc: 0.9290
1494					54s - loss: 0.1968 - acc: 0.9291
	96/168	[========>	- 1	LIA:	53s - loss: 0.1972 - acc: 0.9289
1496	97/168	Ī======>······]	- 1	ETA:	52s - loss: 0.1961 - acc: 0.9293
1497	98/168	<u>[====================================</u>	- 1	ETA:	52s - loss: 0.1956 - acc: 0.9295
1498	99/168	[======================================	- 1	ETA:	51s - loss: 0.1950 - acc: 0.9295
1499	100/168	[======>]	- 1	ETA:	51s - loss: 0.1939 - acc: 0.9302
1500	101/168	[======>]	- 1	ETA:	50s - loss: 0.1930 - acc: 0.9306
1501	102/168	[=======>]	- 1	ETA:	49s - loss: 0.1939 - acc: 0.9305
1502	103/168	[======================================	- 1	ETA:	49s - loss: 0.1936 - acc: 0.9307
1503	104/168	[======================================	- 1	ETA:	48s - loss: 0.1931 - acc: 0.9308
-555	., _00				,

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1504 105/168 [=============>.....] - ETA: 47s - loss: 0.1938 - acc: 0.9301
1507 108/168 [===========>.....] - ETA: 45s - loss: 0.1940 - acc: 0.9303
1124 - val_acc: 0.9626
1568 Epoch 10/21
1569
1570
 1/168 [.....] - ETA: 1:46 - loss: 0.1289 - acc: 0.9625
 2/168 [.....] - ETA: 1:43 - loss: 0.2898 - acc: 0.8938
1571
 1572
1573
 5/168 [.....] - ETA: 1:40 - loss: 0.2367 - acc: 0.9175
6/168 [>.....] - ETA: 1:39 - loss: 0.2484 - acc: 0.9083
1574
1575
 7/168 [>.....] - ETA: 1:39 - loss: 0.2482 - acc: 0.9089
8/168 [>.....] - ETA: 1:38 - loss: 0.2324 - acc: 0.9109
1576
1577
 9/168 [>.....] - ETA: 1:38 - loss: 0.2297 - acc: 0.9139
1578
 10/168 [>.....] - ETA: 1:37 - loss: 0.2316 - acc: 0.9150
1579
```

File - R	Run train_n	etwork_generators
1580	11/168	[>] - ETA: 1:36 - loss: 0.2349 - acc: 0.9159
		[=>] - ETA: 1:36 - loss: 0.2315 - acc: 0.9156
1582	13/168	[=>] - ETA: 1:35 - loss: 0.2253 - acc: 0.9163
1583		[=>] - ETA: 1:34 - loss: 0.2211 - acc: 0.9196
1584	15/168	[=>] - ETA: 1:34 - loss: 0.2219 - acc: 0.9200
1585	16/168	[=>] - ETA: 1:33 - loss: 0.2172 - acc: 0.9203
1586		[==>] - ETA: 1:33 - loss: 0.2102 - acc: 0.9228
1587	18/168	[==>] - ETA: 1:32 - loss: 0.2035 - acc: 0.9264
1588	19/168	[==>] - ETA: 1:31 - loss: 0.2085 - acc: 0.9224
1589		[==>] - ETA: 1:31 - loss: 0.2060 - acc: 0.9231
1590		[==>] - ETA: 1:30 - loss: 0.2020 - acc: 0.9250
1591	22/168	[==>] - ETA: 1:29 - loss: 0.2030 - acc: 0.9244
1592	23/168	[===>] - ETA: 1:29 - loss: 0.2038 - acc: 0.9245
1593		[===>] - ETA: 1:28 - loss: 0.2165 - acc: 0.9240
1594	25/168	[===>] - ETA: 1:27 - loss: 0.2158 - acc: 0.9230
1595	26/168	[===>] - ETA: 1:27 - loss: 0.2139 - acc: 0.9236
1596		[===>] - ETA: 1:26 - loss: 0.2123 - acc: 0.9241
1597	28/168	[====>] - ETA: 1:25 - loss: 0.2119 - acc: 0.9241
1598	29/168	[====>] - ETA: 1:25 - loss: 0.2138 - acc: 0.9224
1599		[====>] - ETA: 1:24 - loss: 0.2143 - acc: 0.9212
		[====>] - ETA: 1:24 - loss: 0.2151 - acc: 0.9206
1601		[====>] - ETA: 1:23 - loss: 0.2197 - acc: 0.9195
1602		[====>] - ETA: 1:22 - loss: 0.2160 - acc: 0.9212
1603		[====>] - ETA: 1:22 - loss: 0.2131 - acc: 0.9228
1604		[====>] - ETA: 1:21 - loss: 0.2107 - acc: 0.9239
1605	36/168	[====>] - ETA: 1:21 - loss: 0.2092 - acc: 0.9247
1606	-	[=====>] - ETA: 1:20 - loss: 0.2092 - acc: 0.9247
1607		[====>] - ETA: 1:19 - loss: 0.2081 - acc: 0.9250
1608		[=====>] - ETA: 1:19 - loss: 0.2089 - acc: 0.9253
1609	40/168	[=====>] - ETA: 1:18 - loss: 0.2088 - acc: 0.9262
1610		[=====>] - ETA: 1:18 - loss: 0.2076 - acc: 0.9265
1611		[=====>] - ETA: 1:17 - loss: 0.2071 - acc: 0.9271
-		
1612		[=====>] - ETA: 1:16 - loss: 0.2088 - acc: 0.9265
1613	44/168	[=====>] - ETA: 1:16 - loss: 0.2082 - acc: 0.9261
1614	45/168	[======>] - ETA: 1:15 - loss: 0.2081 - acc: 0.9267
1615		[======>] - ETA: 1:15 - loss: 0.2063 - acc: 0.9266
1616	47/168	[======>] - ETA: 1:14 - loss: 0.2057 - acc: 0.9269
1617	48/168	[======>] - ETA: 1:13 - loss: 0.2060 - acc: 0.9271
1618		[======>] - ETA: 1:13 - loss: 0.2055 - acc: 0.9265
		[======>] - ETA: 1:12 - loss: 0.2051 - acc: 0.9265
1619		
1620		[======>] - ETA: 1:11 - loss: 0.2050 - acc: 0.9265
1621	52/168	[======>] - ETA: 1:11 - loss: 0.2043 - acc: 0.9267
1622	53/168	[======>] - ETA: 1:10 - loss: 0.2043 - acc: 0.9262
1623		[======>] - ETA: 1:10 - loss: 0.2025 - acc: 0.9269
1624	55/168	[======>] - ETA: 1:09 - loss: 0.2002 - acc: 0.9280
1625		[======>] - ETA: 1:08 - loss: 0.2001 - acc: 0.9283
1626	57/168	[=======>] - ETA: 1:08 - loss: 0.1981 - acc: 0.9292
1		[=======>] - ETA: 1:07 - loss: 0.1972 - acc: 0.9291
1		
1628		[======>] - ETA: 1:07 - loss: 0.1959 - acc: 0.9297
1629	60/168	[======>] - ETA: 1:06 - loss: 0.1941 - acc: 0.9304
1630	61/168	[=======>] - ETA: 1:05 - loss: 0.1932 - acc: 0.9309
1631		[=======>] - ETA: 1:05 - loss: 0.1934 - acc: 0.9317
1		[=======>] - ETA: 1:04 - loss: 0.1936 - acc: 0.9315
1633		[======>] - ETA: 1:04 - loss: 0.1930 - acc: 0.9316
1634	65/168	[=======>] - ETA: 1:03 - loss: 0.1920 - acc: 0.9321
1635		[======>] - ETA: 1:02 - loss: 0.1915 - acc: 0.9326
1636		[=======>] - ETA: 1:02 - loss: 0.1906 - acc: 0.9326
1637		[=======>] - ETA: 1:01 - loss: 0.1903 - acc: 0.9324
1638		[======>] - ETA: 1:00 - loss: 0.1890 - acc: 0.9326
1639		[=======>] - ETA: 1:00 - loss: 0.1879 - acc: 0.9332
1640		[=======>] - ETA: 59s - loss: 0.1873 - acc: 0.9335
1641		[=======>] - ETA: 59s - loss: 0.1884 - acc: 0.9333
1642		[=======>] - ETA: 58s - loss: 0.1875 - acc: 0.9337
1643	74/168	[=======>] - ETA: 57s - loss: 0.1886 - acc: 0.9329
1644		[=======>
1645		[=======>] - ETA: 56s - loss: 0.1878 - acc: 0.9331
1646	77/168	[=======>] - ETA: 56s - loss: 0.1879 - acc: 0.9330
1647	78/168	[=======>] - ETA: 55s - loss: 0.1871 - acc: 0.9333
1648	79/168	[=======>] - ETA: 54s - loss: 0.1866 - acc: 0.9334
1649		[========>] - ETA: 54s - loss: 0.1856 - acc: 0.9341
1650		[========>] - ETA: 53s - loss: 0.1859 - acc: 0.9341
1651	82/168	[========>] - ETA: 53s - loss: 0.1883 - acc: 0.9332
1652	83/168	[========>] - ETA: 52s - loss: 0.1880 - acc: 0.9331
1653	84/168	[=========>] - ETA: 51s - loss: 0.1893 - acc: 0.9324
		[========>] - ETA: 51s - loss: 0.1901 - acc: 0.9321
	QD/168	[========>] - ETA: 50s - loss: 0.1896 - acc: 0.9321
1655		T 1
1656	87/168	[=======>] - ETA: 49s - loss: 0.1896 - acc: 0.9323

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88/168 [========>....] - ETA: 49s - loss: 0.1891 - acc: 0.9327
1657
1658
1659
1660
1661
1662
94/168 [========>....] - ETA: 45s - loss: 0.1878 - acc: 0.9324
1680 111/168 [===========>.....] - ETA: 35s - loss: 0.1821 - acc: 0.9345
1701 132/168 [==============>.....] - ETA: 22s - loss: 0.1781 - acc: 0.9352
```

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0754 - val_acc: 0.9737
1738 Epoch 11/21
1739
      1740
1741
1742
      1743
1744
1745
1746
      7/168 [>.....] - ETA: 1:38 - loss: 0.1283 - acc: 0.9500
      8/168 [>.....] - ETA: 1:38 - loss: 0.1209 - acc: 0.9547
9/168 [>.....] - ETA: 1:37 - loss: 0.1258 - acc: 0.9556
1747
1748
     10/168 [>.....] - ETA: 1:37 - loss: 0.1252 - acc: 0.9575
11/168 [>.....] - ETA: 1:36 - loss: 0.1190 - acc: 0.9591
1749
1750
     12/168 [=>......] - ETA: 1:35 - loss: 0.1267 - acc: 0.9552
13/168 [=>......] - ETA: 1:35 - loss: 0.1275 - acc: 0.9548
14/168 [=>......] - ETA: 1:34 - loss: 0.1279 - acc: 0.9545
1751
1752
1753
     15/168 [=>.....] - ETA: 1:34 - loss: 0.1350 - acc: 0.9525
16/168 [=>.....] - ETA: 1:33 - loss: 0.1334 - acc: 0.9539
1754
1755
1756
     17/168 [==>.....] - ETA: 1:32 - loss: 0.1379 - acc: 0.9537
     18/168 [==>....] - ETA: 1:32 - loss: 0.1377 - acc: 0.9549
19/168 [==>....] - ETA: 1:31 - loss: 0.1414 - acc: 0.9520
1757
1758
     20/168 [==>....] - ETA: 1:30 - loss: 0.1428 - acc: 0.9513
1759
     1760
1761
1762
     24/168 [===>.....] - ETA: 1:28 - loss: 0.1456 - acc: 0.9479
1763
     25/168 [===>....] - ETA: 1:27 - loss: 0.1432 - acc: 0.9490 26/168 [===>....] - ETA: 1:27 - loss: 0.1447 - acc: 0.9486
1764
1765
     27/168 [===>....] - ETA: 1:26 - loss: 0.1449 - acc: 0.9486
1766
     28/168 [====> . . . . . ] - ETA: 1:25 - loss: 0.1435 - acc: 0.9491
29/168 [====> . . . . ] - ETA: 1:25 - loss: 0.1441 - acc: 0.9491
30/168 [====> . . . . . ] - ETA: 1:24 - loss: 0.1447 - acc: 0.9483
1767
1768
1769
     31/168 [====>.....] - ETA: 1:24 - loss: 0.1415 - acc: 0.9500
1770
     32/168 [====>.....] - ETA: 1:23 - loss: 0.1403 - acc: 0.9496
1771
     33/168 [====>. . . . . ] - ETA: 1:23 - loss: 0.1408 - acc: 0.9496
34/168 [====>. . . . . ] - ETA: 1:22 - loss: 0.1405 - acc: 0.9500
35/168 [====>. . . . . ] - ETA: 1:21 - loss: 0.1401 - acc: 0.9500
1772
1773
1774
     36/168 [=====> ... ] - ETA: 1:21 - loss: 0.1410 - acc: 0.9497
37/168 [=====> ... ] - ETA: 1:20 - loss: 0.1395 - acc: 0.9503
1775
1776
1777
      38/168 [=====>.....] - ETA: 1:19 - loss: 0.1428 - acc: 0.9500
     39/168 [=====> ... ] - ETA: 1:19 - loss: 0.1432 - acc: 0.9497
40/168 [=====> ... ] - ETA: 1:18 - loss: 0.1427 - acc: 0.9503
1778
1779
     41/168 [=====>.....] - ETA: 1:18 - loss: 0.1421 - acc: 0.9503
1780
     42/168 [=====>....] - ETA: 1:17 - loss: 0.1482 - acc: 0.9506
1781
     43/168 [=====>....] - ETA: 1:16 - loss: 0.1465 - acc: 0.9512
44/168 [=====>....] - ETA: 1:16 - loss: 0.1458 - acc: 0.9517
1782
1783
1784
     45/168 [======>.....] - ETA: 1:15 - loss: 0.1480 - acc: 0.9508
     1785
1786
     48/168 [======>....] - ETA: 1:13 - loss: 0.1519 - acc: 0.9500
49/168 [======>....] - ETA: 1:13 - loss: 0.1516 - acc: 0.9500
1787
1788
     50/168 [======>....] - ETA: 1:12 - loss: 0.1529 - acc: 0.9498
51/168 [=======>....] - ETA: 1:11 - loss: 0.1522 - acc: 0.9498
1789
1790
     52/168 [=======>.....] - ETA: 1:11 - loss: 0.1502 - acc: 0.9507
1791
     53/168 [=======>....] - ETA: 1:10 - loss: 0.1500 - acc: 0.9505
54/168 [=======>....] - ETA: 1:10 - loss: 0.1501 - acc: 0.9502
1792
1793
     55/168 [=======>.....] - ETA: 1:09 - loss: 0.1493 - acc: 0.9502
1794
     56/168 [=======>....] - ETA: 1:08 - loss: 0.1502 - acc: 0.9498
1795
     57/168 [======>.....] - ETA: 1:08 - loss: 0.1496 - acc: 0.9500
1796
     58/168 [=======>.....] - ETA: 1:07 - loss: 0.1511 - acc: 0.9494
1797
     59/168 [=======>....] - ETA: 1:07 - loss: 0.1505 - acc: 0.9492
1798
     60/168 [========>....] - ETA: 1:06 - loss: 0.1502 - acc: 0.9492 61/168 [========>....] - ETA: 1:05 - loss: 0.1521 - acc: 0.9488
1799
1800
     62/168 [=======>....] - ETA: 1:05 - loss: 0.1512 - acc: 0.9492
1801
     1802
1803
     65/168 [=======>.....] - ETA: 1:03 - loss: 0.1503 - acc: 0.9496
1804
     66/168 [=======>....] - ETA: 1:02 - loss: 0.1523 - acc: 0.9485
1805
     67/168 [=========>....] - ETA: 1:02 - loss: 0.1516 - acc: 0.9485 68/168 [========>....] - ETA: 1:01 - loss: 0.1540 - acc: 0.9487
1806
1807
      69/168 [=======>.....] - ETA: 1:00 - loss: 0.1542 - acc: 0.9487
1808
1809
     70/168 [======>>.....] - ETA: 1:00 - loss: 0.1538 - acc: 0.9488
```

```
71/168 [=======>....] - ETA: 59s - loss: 0.1544 - acc: 0.9486
1810
 72/168 [========>.....] - ETA: 59s - loss: 0.1536 - acc: 0.9488 73/168 [=======>.....] - ETA: 59s - loss: 0.1532 - acc: 0.9485
1811
1812
 1813
1814
1815
 77/168 [=======>....] - ETA: 55s - loss: 0.1534 - acc: 0.9481
1816
 1817
1818
1819
1820
1821
1822
 84/168 [===========>....] - ETA: 51s - loss: 0.1558 - acc: 0.9482
1823
 1824
1825
 1826
1827
1828
1829
1830
 1831
1832
 94/168 [=======>: 0.9468 - Loss: 0.1570 - acc: 0.9468
1833
 1834
1835
1836
1840 101/168 [===========>.....] - ETA: 41s - loss: 0.1586 - acc: 0.9467
1847 108/168 [===========>.....] - ETA: 36s - loss: 0.1593 - acc: 0.9462
1854 115/168 [============>....] - ETA: 32s - loss: 0.1580 - acc: 0.9464
1861 122/168 [==============>....] - ETA: 28s - loss: 0.1567 - acc: 0.9471
```

```
0674 - val_acc: 0.9749
1908 Epoch 12/21
1909
    1/168 [..............] - ETA: 1:45 - loss: 0.2075 - acc: 0.9500 2/168 [..............] - ETA: 1:42 - loss: 0.1498 - acc: 0.9625
1910
1911
     3/168 [.....] - ETA: 1:41 - loss: 0.1639 - acc: 0.9500
1912
     4/168 [...... 0.1463 - acc: 0.9563
1913
    1914
1915
     7/168 [>.....] - ETA: 1:39 - loss: 0.1476 - acc: 0.9536
1916
    8/168 [>.....] - ETA: 1:38 - loss: 0.1394 - acc: 0.9531
9/168 [>.....] - ETA: 1:38 - loss: 0.1451 - acc: 0.9514
1917
1918
    10/168 [>.....] - ETA: 1:37 - loss: 0.1392 - acc: 0.9550
1919
    11/168 [>......] - ETA: 1:36 - loss: 0.1363 - acc: 0.9557
12/168 [=>......] - ETA: 1:36 - loss: 0.1467 - acc: 0.9563
13/168 [=>......] - ETA: 1:35 - loss: 0.1533 - acc: 0.9538
1920
1921
1922
    14/168 [=>.....] - ETA: 1:35 - loss: 0.1519 - acc: 0.9536
1923
    15/168 [=>.....] - ETA: 1:34 - loss: 0.1491 - acc: 0.9550
1924
   1925
1926
1927
1928
1929
1930
    21/168 [==>.....] - ETA: 1:30 - loss: 0.1512 - acc: 0.9476
    22/168 [==>.....] - ETA: 1:30 - loss: 0.1504 - acc: 0.9477
23/168 [===>.....] - ETA: 1:29 - loss: 0.1531 - acc: 0.9473
1931
1932
    24/168 [===>.....] - ETA: 1:29 - loss: 0.1589 - acc: 0.9438
1933
    25/168 [===>.....] - ETA: 1:28 - loss: 0.1553 - acc: 0.9460
1934
    26/168 [===>...] - ETA: 1:27 - loss: 0.1563 - acc: 0.9452 27/168 [===>...] - ETA: 1:27 - loss: 0.1571 - acc: 0.9440
1935
1936
1937
    28/168 [====>.....] - ETA: 1:26 - loss: 0.1583 - acc: 0.9433
    29/168 [====> ... ] - ETA: 1:25 - loss: 0.1582 - acc: 0.9427 30/168 [====> ... ] - ETA: 1:25 - loss: 0.1591 - acc: 0.9425
1938
1939
   31/168 [====>...] - ETA: 1:24 - loss: 0.1586 - acc: 0.9423 32/168 [====>...] - ETA: 1:23 - loss: 0.1576 - acc: 0.9426
1940
1941
    33/168 [====>...] - ETA: 1:23 - loss: 0.1559 - acc: 0.9424
34/168 [====>...] - ETA: 1:22 - loss: 0.1546 - acc: 0.9430
1942
1943
1944
    35/168 [=====>.....] - ETA: 1:22 - loss: 0.1546 - acc: 0.9425
    36/168 [=====>...] - ETA: 1:21 - loss: 0.1539 - acc: 0.9427 37/168 [=====>...] - ETA: 1:20 - loss: 0.1550 - acc: 0.9422
1945
1946
    38/168 [=====>.....] - ETA: 1:20 - loss: 0.1546 - acc: 0.9418
1947
    39/168 [=====>.....] - ETA: 1:19 - loss: 0.1535 - acc: 0.9420
1948
    40/168 [=====>.....] - ETA: 1:18 - loss: 0.1516 - acc: 0.9428
1949
    41/168 [=====>.....] - ETA: 1:18 - loss: 0.1528 - acc: 0.9430
1950
    42/168 [=====>.....] - ETA: 1:17 - loss: 0.1527 - acc: 0.9435
1951
    43/168 [=====>....] - ETA: 1:17 - loss: 0.1535 - acc: 0.9430
44/168 [=====>....] - ETA: 1:16 - loss: 0.1538 - acc: 0.9435
1952
1953
    45/168 [======>.....] - ETA: 1:15 - loss: 0.1526 - acc: 0.9436
1954
    46/168 [=======> ...........] - ETA: 1:15 - loss: 0.1539 - acc: 0.9438
47/168 [=======> ...........] - ETA: 1:14 - loss: 0.1522 - acc: 0.9441
1955
1956
1957
    48/168 [======>.....] - ETA: 1:13 - loss: 0.1515 - acc: 0.9448
    49/168 [======>.....] - ETA: 1:13 - loss: 0.1496 - acc: 0.9454
1958
    50/168 [======>....] - ETA: 1:12 - loss: 0.1491 - acc: 0.9455 51/168 [=======>.....] - ETA: 1:12 - loss: 0.1481 - acc: 0.9461
1959
1960
    52/168 [=======>.....] - ETA: 1:11 - loss: 0.1461 - acc: 0.9469
1961
1962
    53/168 [======>.....] - ETA: 1:10 - loss: 0.1451 - acc: 0.9474
```

```
54/168 [======>.....] - ETA: 1:10 - loss: 0.1441 - acc: 0.9477
1963
  55/168 [=======>.....] - ETA: 1:09 - loss: 0.1438 - acc: 0.9477 56/168 [======>.....] - ETA: 1:09 - loss: 0.1438 - acc: 0.9478
1964
1965
  1966
1967
1968
  60/168 [======>....] - ETA: 1:06 - loss: 0.1428 - acc: 0.9492
1969
  1970
1971
1972
1973
1974
1975
  1976
1977
1978
  1979
1980
1981
1982
1983
  1984
1985
  77/168 [=======>....] - ETA: 56s - loss: 0.1474 - acc: 0.9489
1986
  1987
1988
1989
  1990
1991
1992
  84/168 [========>....] - ETA: 51s - loss: 0.1486 - acc: 0.9485
1993
  1994
1995
  1996
  1997
1998
1999
  91/168 [=======>:...] - ETA: 47s - loss: 0.1501 - acc: 0.9479
  2001
2002
2003
98/168 [=========>....] - ETA: 43s - loss: 0.1518 - acc: 0.9469
2010 101/168 [============>.....] - ETA: 41s - loss: 0.1506 - acc: 0.9475
2014 105/168 [==============>.....] - ETA: 38s - loss: 0.1496 - acc: 0.9481
2021 112/168 [==============>.....] - ETA: 34s - loss: 0.1522 - acc: 0.9470
2024 115/168 [================>......] - ETA: 32s - loss: 0.1513 - acc: 0.9471
2028 119/168 [==============>.....] - ETA: 30s - loss: 0.1529 - acc: 0.9466
2031 122/168 [==============>....] - ETA: 28s - loss: 0.1532 - acc: 0.9467
```

```
0650 - val_acc: 0.9792
2078 Epoch 13/21
2079
   1/168 [.....] - ETA: 1:44 - loss: 0.2147 - acc: 0.9000
2080
   2/168 [.....] - ETA: 1:43 - loss: 0.1602 - acc: 0.9438
3/168 [.....] - ETA: 1:42 - loss: 0.1491 - acc: 0.9500
2081
2082
2083
   4/168 [.....] - ETA: 1:41 - loss: 0.1701 - acc: 0.9406
   2084
2085
   7/168 [>.....] - ETA: 1:39 - loss: 0.1521 - acc: 0.9500
2086
   8/168 [>.....] - ETA: 1:38 - loss: 0.1452 - acc: 0.9500
2087
  2088
2089
2090
  11/168 [>.....] - ETA: 1:36 - loss: 0.1646 - acc: 0.9466
  12/168 [=>......] - ETA: 1:36 - loss: 0.1647 - acc: 0.9469
13/168 [=>......] - ETA: 1:35 - loss: 0.1649 - acc: 0.9462
2091
2092
  14/168 [=>......] - ETA: 1:34 - loss: 0.1604 - acc: 0.9473
15/168 [=>......] - ETA: 1:34 - loss: 0.1600 - acc: 0.9483
2093
2094
  16/168 [=>.....] - ETA: 1:33 - loss: 0.1614 - acc: 0.9477 17/168 [==>.....] - ETA: 1:33 - loss: 0.1656 - acc: 0.9463
2095
2096
2097
  18/168 [==>.....] - ETA: 1:32 - loss: 0.1625 - acc: 0.9479
  19/168 [==>....] - ETA: 1:31 - loss: 0.1590 - acc: 0.9487 20/168 [==>....] - ETA: 1:31 - loss: 0.1596 - acc: 0.9481
2098
2099
  21/168 [==>.....] - ETA: 1:30 - loss: 0.1588 - acc: 0.9476
2100
  22/168 [==>.....] - ETA: 1:30 - loss: 0.1555 - acc: 0.9489
2101
  23/168 [===>.....] - ETA: 1:29 - loss: 0.1535 - acc: 0.9484
2102
  24/168 [===>.....] - ETA: 1:28 - loss: 0.1529 - acc: 0.9484
2103
2104
  25/168 [===>.....] - ETA: 1:28 - loss: 0.1498 - acc: 0.9505
  26/168 [===>....] - ETA: 1:27 - loss: 0.1497 - acc: 0.9514
27/168 [===>....] - ETA: 1:26 - loss: 0.1486 - acc: 0.9514
2105
2106
  28/168 [====>.....] - ETA: 1:26 - loss: 0.1462 - acc: 0.9522
2107
  29/168 [====> ... ] - ETA: 1:25 - loss: 0.1439 - acc: 0.9530 30/168 [====> ... ] - ETA: 1:25 - loss: 0.1422 - acc: 0.9538
2108
2109
2110
  31/168 [====>...... ] - ETA: 1:24 - loss: 0.1419 - acc: 0.9540
  32/168 [====>.....] - ETA: 1:23 - loss: 0.1392 - acc: 0.9547
2111
  33/168 [====>....] - ETA: 1:23 - loss: 0.1391 - acc: 0.9545
34/168 [====>....] - ETA: 1:22 - loss: 0.1392 - acc: 0.9537
2112
2113
  35/168 [=====>.....] - ETA: 1:21 - loss: 0.1412 - acc: 0.9525
2114
2115 36/168 [=====>......] - ETA: 1:21 - loss: 0.1400 - acc: 0.9521
```

File - F	Run train_n	etwork_generators			
2116	37/168	Γ====> 1	_	FTΔ·	1:20 - loss: 0.1382 - acc: 0.9524
					1:20 - loss: 0.1368 - acc: 0.9530
2118					1:19 - loss: 0.1384 - acc: 0.9522
					1:18 - loss: 0.1368 - acc: 0.9525
2120	41/168	[=====>]	-	ETA:	1:18 - loss: 0.1365 - acc: 0.9524
2121	42/168	[=====>]	_	ETA:	1:17 - loss: 0.1403 - acc: 0.9512
					1:17 - loss: 0.1406 - acc: 0.9512
					1:16 - loss: 0.1415 - acc: 0.9514
					1:15 - loss: 0.1391 - acc: 0.9525
2125	46/168	[======>]	-	ETA:	1:15 - loss: 0.1401 - acc: 0.9524
2126	47/168	[=====>]	_	ETA:	1:14 - loss: 0.1412 - acc: 0.9516
2127					1:13 - loss: 0.1396 - acc: 0.9523
					1:13 - loss: 0.1398 - acc: 0.9518
2129					1:12 - loss: 0.1386 - acc: 0.9523
2130	51/168	[======>]	-	ETA:	1:12 - loss: 0.1389 - acc: 0.9522
2131	52/168	[======>]	-	ETA:	1:11 - loss: 0.1400 - acc: 0.9517
2132	53/168	[======>]	_	ETA:	1:10 - loss: 0.1400 - acc: 0.9517
					1:10 - loss: 0.1420 - acc: 0.9512
					1:09 - loss: 0.1420 - acc: 0.9507
					1:08 - loss: 0.1426 - acc: 0.9500
2136	57/168	[======>]	-	ETA:	1:08 - loss: 0.1427 - acc: 0.9500
2137	58/168	[======>	_	ETA:	1:07 - loss: 0.1426 - acc: 0.9502
	59/168	[=======>,	_	ETA.	1:07 - loss: 0.1421 - acc: 0.9504
2139					1:06 - loss: 0.1408 - acc: 0.9508
					1:05 - loss: 0.1404 - acc: 0.9510
					1:05 - loss: 0.1392 - acc: 0.9516
					1:04 - loss: 0.1380 - acc: 0.9520
					1:04 - loss: 0.1372 - acc: 0.9521
					1:03 - loss: 0.1367 - acc: 0.9523
2145	66/168	[=======>]	-	ETA:	1:02 - loss: 0.1375 - acc: 0.9517
2146	67/168	[======>]	_	ETA:	1:02 - loss: 0.1375 - acc: 0.9517
2147					1:01 - loss: 0.1370 - acc: 0.9520
					1:00 - loss: 0.1384 - acc: 0.9513
2149					1:00 - loss: 0.1378 - acc: 0.9514
2150					59s - loss: 0.1372 - acc: 0.9512
2151					59s - loss: 0.1371 - acc: 0.9516
2152	73/168	[========>]	-	ETA:	58s - loss: 0.1380 - acc: 0.9512
2153	74/168	[=======>]	-	ETA:	57s - loss: 0.1380 - acc: 0.9514
2154					57s - loss: 0.1381 - acc: 0.9515
2155					56s - loss: 0.1373 - acc: 0.9518
2156					56s - loss: 0.1362 - acc: 0.9523
2157	70/160	[_	ETA.	55s - loss: 0.1360 - acc: 0.9522
	70/100	[ETA.	535 - 1055. 0.1300 - acc. 0.9322
2158	79/168	[=========>]	-	EIA:	54s - loss: 0.1366 - acc: 0.9519
2159					54s - loss: 0.1360 - acc: 0.9522
2160	81/168	[=========>]	-	ETA:	53s - loss: 0.1357 - acc: 0.9523
2161					52s - loss: 0.1352 - acc: 0.9527
2162	83/168	[========>]	-	ETA:	52s - loss: 0.1346 - acc: 0.9530
2163	84/168	[=======>,]	_	ETA:	51s - loss: 0.1340 - acc: 0.9534
					51s - loss: 0.1334 - acc: 0.9537
					50s - loss: 0.1335 - acc: 0.9532
2166					49s - loss: 0.1333 - acc: 0.9533
2167	00/100	[]	_	ETA.	49s - loss: 0.1340 - acc: 0.9531
2168					48s - loss: 0.1344 - acc: 0.9527
2169					47s - loss: 0.1349 - acc: 0.9525
2170					47s - loss: 0.1351 - acc: 0.9522
2171					46s - loss: 0.1351 - acc: 0.9519
2172	93/168	[======================================	-	ETA:	46s - loss: 0.1343 - acc: 0.9522
2173					45s - loss: 0.1336 - acc: 0.9525
2174					44s - loss: 0.1335 - acc: 0.9524
2175					44s - loss: 0.1337 - acc: 0.9521
					43s - loss: 0.1338 - acc: 0.9518
					43s - loss: 0.1338 - acc: 0.9519
					42s - loss: 0.1339 - acc: 0.9520
					41s - loss: 0.1335 - acc: 0.9519
					41s - loss: 0.1361 - acc: 0.9514
2181	102/168	<u>[====================================</u>	-	ETA:	40s - loss: 0.1362 - acc: 0.9516
2182	103/168	[======================================	-	ETA:	39s - loss: 0.1358 - acc: 0.9516
2183	104/168	[========>]	-	ETA:	39s - loss: 0.1360 - acc: 0.9514
2184	105/168	[======================================	_	ETA:	38s - loss: 0.1357 - acc: 0.9515
					38s - loss: 0.1365 - acc: 0.9512
					37s - loss: 0.1363 - acc: 0.9513
2127	108/168	Γ=====================================	_	FTA.	36s - loss: 0.1363 - acc: 0.9514
2107	100/100	[_	ETA.	36s - loss: 0.1368 - acc: 0.9511
2100	110/160	[_	ETA:	25c - locc: 0 1277 - 200: 0 0500
					35s - loss: 0.1377 - acc: 0.9509
					35s - loss: 0.1375 - acc: 0.9509
					34s - loss: 0.1374 - acc: 0.9509
2192	113/168	[======================================	-	ETA:	33s - loss: 0.1375 - acc: 0.9507
i					

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2193 114/168 [============>....] - ETA: 33s - loss: 0.1379 - acc: 0.9503
2196 117/168 [============>.....] - ETA: 31s - loss: 0.1383 - acc: 0.9505
2213 134/168 [==============>.....] - ETA: 20s - loss: 0.1366 - acc: 0.9514
2237 158/168 [===================================>..] - ETA: 6s - loss: 0.1333 - acc: 0.9528
0437 - val_acc: 0.9884
2248 Epoch 14/21
2249
2250
  1/168 [.....] - ETA: 1:45 - loss: 0.2879 - acc: 0.9375
  2/168 [.....] - ETA: 1:43 - loss: 0.2517 - acc: 0.9375
3/168 [.....] - ETA: 1:42 - loss: 0.2021 - acc: 0.9500
2251
2252
  2253
2254
2255
  7/168 [>.....] - ETA: 1:39 - loss: 0.1701 - acc: 0.9536
2256
2257
  8/168 [>.....] - ETA: 1:38 - loss: 0.1768 - acc: 0.9484
 9/168 [>.....] - ETA: 1:38 - loss: 0.1708 - acc: 0.9486
10/168 [>.....] - ETA: 1:37 - loss: 0.1746 - acc: 0.9425
2258
2259
 2260
2261
2262
2263
 14/168 [=>.....] - ETA: 1:34 - loss: 0.1532 - acc: 0.9491
 15/168 [=>.....] - ETA: 1:34 - loss: 0.1594 - acc: 0.9483
2264
 16/168 [=>.....] - ETA: 1:33 - loss: 0.1545 - acc: 0.9500
17/168 [==>.....] - ETA: 1:33 - loss: 0.1538 - acc: 0.9507
2265
2266
 18/168 [==>.....] - ETA: 1:32 - loss: 0.1553 - acc: 0.9507
2267
2268 19/168 [==>......] - ETA: 1:31 - loss: 0.1578 - acc: 0.9493
```

File - R	File - Run train_network_generators					
2269	20/168	[==>] - ETA: 1:30 - l	oss: 0.1562 - acc: 0.9500			
2270	21/168	[==>] - ETA: 1:30 - l	oss: 0.1562 - acc: 0.9488			
2271		[==>] - ETA: 1:29 - l				
		[===>] - ETA: 1:28 - l				
2273		[===>] - ETA: 1:28 - l				
2274		[===>] - ETA: 1:27 - l				
2275		[===>] - ETA: 1:26 - l				
l l						
2276		[===>] - ETA: 1:26 - l				
2277		[====>] - ETA: 1:25 - l				
2278		[====>] - ETA: 1:25 - l				
2279		[====>] - ETA: 1:24 - l				
2280		[====>] - ETA: 1:23 - l				
2281	32/168	[====>] - ETA: 1:23 - l	oss: 0.1518 - acc: 0.9520			
2282	33/168	[====>] - ETA: 1:22 - l	oss: 0.1511 - acc: 0.9519			
2283		[====>] - ETA: 1:22 - l				
2284		[====>] - ETA: 1:21 - l				
2285		[====>] - ETA: 1:20 - l				
2286		[====>] - ETA: 1:20 - l				
2287		[====>] - ETA: 1:20 - L				
		_				
2288		[====>] - ETA: 1:19 - l				
		[=====>] - ETA: 1:18 - L				
2290		[=====>] - ETA: 1:17 - l				
		[=====>] - ETA: 1:17 - l				
2292	43/168	[=====>] - ETA: 1:16 - l	oss: 0.1490 - acc: 0.9497			
2293		[=====>] - ETA: 1:16 - l				
		[======>] - ETA: 1:15 - l				
2295		[======>] - ETA: 1:14 - l				
2296		[======>] - ETA: 1:14 - l				
2297		[======>] - ETA: 1:13 - l				
2298		[======>] - ETA: 1:13 - L				
2299	50/160	[======>] - ETA: 1:12 - L	oss: 0.1400 acc. 0.9500			
2300	51/166	[======>] - ETA: 1:11 - l	.055: 0.1474 - acc: 0.9515			
		[=======>] - ETA: 1:11 - L				
		[======>] - ETA: 1:10 - l				
2303		[======>] - ETA: 1:09 - l				
2304		[======>] - ETA: 1:09 - l				
2305	56/168	[======>] - ETA: 1:08 - l	oss: 0.1440 - acc: 0.9529			
2306	57/168	[======>] - ETA: 1:08 - l	oss: 0.1433 - acc: 0.9535			
2307	58/168	[=======>] - ETA: 1:07 - l	oss: 0.1425 - acc: 0.9537			
2308		[=======>] - ETA: 1:06 - l				
	60/168	[=======>] - ETA: 1:06 - l	oss: 0.1401 - acc: 0.9544			
2310		[=======>] - ETA: 1:05 - l				
		[=======>] - ETA: 1:05 - l				
		[========>] - ETA: 1:03 - L				
2313		[========>] - ETA: 1:03 - L				
1		[=======>] - ETA: 1:03 - L				
2315	66/168	[=======>] - ETA: 1:02 - L	oss: 0.1374 - acc: 0.9540			
		[=======>] - ETA: 1:01 - l				
2317		[=======>] - ETA: 1:01 - l				
2318		[=======>] - ETA: 1:00 - l				
2319	70/168	[========>] - ETA: 1:00 - l	oss: 0.1346 - acc: 0.9545			
2320		[========>] - ETA: 59s - lo				
2321		[=======>] - ETA: 58s - lo				
2322		[========>] - ETA: 58s - lo				
2323		[=========>] - ETA: 57s - lo				
2324		[=========>] - ETA: 57s - lo				
2324		[=========>] - ETA: 575 - to				
l l		[==========>] - ETA: 56S - 10				
2326	-	[==========>] - ETA: 55S - 10				
2327	-	-				
2328		[========>] - ETA: 54s - lo				
2329		[=========>] - ETA: 54s - lo				
2330		[========>] - ETA: 53s - lo				
1		[=========>] - ETA: 52s - lo				
2332		[========>] - ETA: 52s - lo				
2333		[=========>] - ETA: 51s - lo				
2334	85/168	[=====================================	ss: 0.1288 - acc: 0.9554			
2335		[=========>] - ETA: 50s - lo				
2336	87/168	[=====================================	ss: 0.1301 - acc: 0.9553			
2337		[=====================================				
2338		[=====================================				
2339		[=====================================				
l l						
2340	02 /1 C0 21/ 100	[=====================================	0.1270 - acc. 0.9502			
		[=====================================				
l l		[=====================================				
2343		[=====================================				
2344	95/168	[=====================================	ss: U.1268 - acc: U.9564			
2345	96/168	[=====================================	ss: 0.1265 - acc: 0.9565			

```
2346 97/168 [=========>.....] - ETA: 43s - loss: 0.1271 - acc: 0.9564
2347 98/168 [=========>.....] - ETA: 42s - loss: 0.1265 - acc: 0.9566
2348 99/168 [===========>.....] - ETA: 42s - loss: 0.1260 - acc: 0.9567
2349 100/168 [==========>.....] - ETA: 41s - loss: 0.1260 - acc: 0.9566
2352 103/168 [===============>.....] - ETA: 39s - loss: 0.1255 - acc: 0.9568
2359 110/168 [==============>.....] - ETA: 35s - loss: 0.1227 - acc: 0.9581
2363 114/168 [=============>.....] - ETA: 33s - loss: 0.1219 - acc: 0.9584
2408 159/168 [===================================>..] - ETA: 5s - loss: 0.1217 - acc: 0.9575
0795 - val_acc: 0.9678
2418 Epoch 15/21
2419
 1/168 [.....] - ETA: 1:43 - loss: 0.1456 - acc: 0.9625
2420
2421
 2/168 [.....] - ETA: 1:42 - loss: 0.1182 - acc: 0.9688
```

File - R	un train_n	etwork_generators		
2422	3/168	Γ 1 -	- FTΔ·	1:40 - loss: 0.1140 - acc: 0.9667
2423	_			
				1:40 - loss: 0.1108 - acc: 0.9688
2424				1:39 - loss: 0.1001 - acc: 0.9725
2425	6/168	[>] -	– ETA:	1:38 - loss: 0.0956 - acc: 0.9729
2426	7/168	[>] -	- ETA:	1:38 - loss: 0.0873 - acc: 0.9750
2427	8/168	[>] -	- FTA:	1:37 - loss: 0.0860 - acc: 0.9734
2428				1:37 - loss: 0.0890 - acc: 0.9722
_				
2429				1:36 - loss: 0.0922 - acc: 0.9700
2430				1:36 - loss: 0.0919 - acc: 0.9682
2431	12/168	[=>] -	- ETA:	1:35 - loss: 0.0963 - acc: 0.9677
2432	13/168	[=>] -	- ETA:	1:34 - loss: 0.0945 - acc: 0.9692
2433				1:34 - loss: 0.1026 - acc: 0.9652
2434	15/168	[-\s 1 -	_ ETA:	1:33 - loss: 0.1039 - acc: 0.9658
2435				1:33 - loss: 0.1049 - acc: 0.9656
2436				1:32 - loss: 0.1033 - acc: 0.9669
2437	18/168	[==>] -	– ETA:	1:32 - loss: 0.0995 - acc: 0.9688
2438	19/168	[==>] -	- ETA:	1:31 - loss: 0.1058 - acc: 0.9671
2439				1:30 - loss: 0.1083 - acc: 0.9656
2440				1:30 - loss: 0.1084 - acc: 0.9655
				1:29 - loss: 0.1073 - acc: 0.9659
				1:28 - loss: 0.1060 - acc: 0.9658
2443	24/168	[===>] -	– ETA:	1:28 - loss: 0.1067 - acc: 0.9651
2444				1:27 - loss: 0.1074 - acc: 0.9640
2445				1:27 - loss: 0.1069 - acc: 0.9639
2446				1:26 - loss: 0.1093 - acc: 0.9630
2447				1:25 - loss: 0.1095 - acc: 0.9625
2448				1:25 - loss: 0.1116 - acc: 0.9616
2449				1:24 - loss: 0.1125 - acc: 0.9617
2450	31/168	[====>] -	- ETA:	1:23 - loss: 0.1102 - acc: 0.9625
2451	32/168	[====>] -	- ETA:	1:23 - loss: 0.1113 - acc: 0.9617
2452	33/168	[====>] -	- ETA:	1:22 - loss: 0.1109 - acc: 0.9617
2453				1:22 - loss: 0.1129 - acc: 0.9607
				1:21 - loss: 0.1128 - acc: 0.9611
2455				1:20 - loss: 0.1146 - acc: 0.9604
2456				1:20 - loss: 0.1137 - acc: 0.9608
2457				1:19 - loss: 0.1144 - acc: 0.9612
2458	39/168	[====>] -	- ETA:	1:19 - loss: 0.1141 - acc: 0.9612
2459	40/168	[=====>] -	- ETA:	1:18 - loss: 0.1124 - acc: 0.9619
2460				1:17 - loss: 0.1136 - acc: 0.9616
				1:17 - loss: 0.1145 - acc: 0.9610
				1:16 - loss: 0.1161 - acc: 0.9599
2463	44/168	[=====>] -	– ETA:	1:15 - loss: 0.1166 - acc: 0.9597
2464	45/168	[======>] -	- ETA:	1:15 - loss: 0.1170 - acc: 0.9594
2465	46/168	[======>] -	- ETA:	1:14 - loss: 0.1163 - acc: 0.9595
2466	47/168	[======>] -	- FTA:	1:14 - loss: 0.1161 - acc: 0.9598
2467	_	_		1:13 - loss: 0.1154 - acc: 0.9596
2468		-		1:12 - loss: 0.1159 - acc: 0.9587
				1:12 - loss: 0.1154 - acc: 0.9588
2470				1:11 - loss: 0.1154 - acc: 0.9588
2471				1:11 - loss: 0.1149 - acc: 0.9591
2472	53/168	[======>] -	- ETA:	1:10 - loss: 0.1153 - acc: 0.9594
2473				1:09 - loss: 0.1165 - acc: 0.9590
2474				1:09 - loss: 0.1157 - acc: 0.9591
2475				1:08 - loss: 0.1166 - acc: 0.9592
2476				1:08 - loss: 0.1162 - acc: 0.9594
2477	20/100	[] -	EIA:	1:07 - loss: 0.1168 - acc: 0.9599
2478				1:06 - loss: 0.1167 - acc: 0.9595
2479				1:06 - loss: 0.1162 - acc: 0.9594
2480				1:05 - loss: 0.1163 - acc: 0.9596
2481	62/168	[=======>] -	- ETA:	1:04 - loss: 0.1171 - acc: 0.9593
2482				1:04 - loss: 0.1178 - acc: 0.9589
2483				1:03 - loss: 0.1173 - acc: 0.9592
2484				1:03 - loss: 0.1168 - acc: 0.9594
2485				1:02 - loss: 0.1166 - acc: 0.9595
2486				1:01 - loss: 0.1162 - acc: 0.9595
2487				1:01 - loss: 0.1167 - acc: 0.9588
2488	69/168	[======>1 -	- ETA:	1:00 - loss: 0.1165 - acc: 0.9592
2489	70/168	[=======>,	- ETA	1:00 - loss: 0.1158 - acc: 0.9598
2490		[=======>] -		
l l				
2491		[=======>] -		
2492		[======================================		
2493	74/168	[=======>] -	- ETA:	57s - Loss: 0.1171 - acc: 0.9591
2494	75/168	[======================================	- ETA:	57s - loss: 0.1172 - acc: 0.9588
2495		[======================================		
2496		[=======>] -		
2497		[======================================		
2498		[======================================		
2490	12/100		CIA:	J→3 (USS. U.1221 - dCC. U.93/0
1				

```
80/168 [=======>.....] - ETA: 53s - loss: 0.1228 - acc: 0.9577
 81/168 [=========>....] - ETA: 53s - loss: 0.1227 - acc: 0.9579
82/168 [========>....] - ETA: 52s - loss: 0.1232 - acc: 0.9576
2500
 83/168 [=======> .....] - ETA: 52s - loss: 0.1233 - acc: 0.9572
2502
 2503
2504
 86/168 [=======>>.....] - ETA: 50s - loss: 0.1226 - acc: 0.9578
2512 93/168 [==========>.....] - ETA: 46s - loss: 0.1200 - acc: 0.9587
 2513
2514
2522 103/168 [============>.....] - ETA: 39s - loss: 0.1195 - acc: 0.9586
2525 106/168 [==========>.....] - ETA: 38s - loss: 0.1200 - acc: 0.9581
2529 110/168 [=============>.....] - ETA: 35s - loss: 0.1191 - acc: 0.9585
2532 113/168 [============>.....] - ETA: 33s - loss: 0.1184 - acc: 0.9588
2536 117/168 [==============>.....] - ETA: 31s - loss: 0.1191 - acc: 0.9582
2543 124/168 [===============>.....] - ETA: 27s - loss: 0.1192 - acc: 0.9587
2546 127/168 [=============>.....] - ETA: 25s - loss: 0.1192 - acc: 0.9587
2547 128/168 [==============>.....] - ETA: 24s - loss: 0.1192 - acc: 0.9587
```

```
0334 - val_acc: 0.9907
2588 Epoch 16/21
2589
     1/168 [.....] - ETA: 1:44 - loss: 0.1104 - acc: 0.9500
2590
     2/168 [.....] - ETA: 1:42 - loss: 0.0987 - acc: 0.9625
2591
     3/168 [.....] - ETA: 1:41 - loss: 0.1131 - acc: 0.9625
2592
     2593
2594
     6/168 [>.....] - ETA: 1:39 - loss: 0.1383 - acc: 0.9563
2595
     7/168 [>......] - ETA: 1:38 - loss: 0.1349 - acc: 0.9571
8/168 [>......] - ETA: 1:38 - loss: 0.1410 - acc: 0.9531
2596
2597
2598
     10/168 [>.....] - ETA: 1:37 - loss: 0.1391 - acc: 0.9513
11/168 [>.....] - ETA: 1:36 - loss: 0.1341 - acc: 0.9523
2599
2600
    12/168 [=>.....] - ETA: 1:35 - loss: 0.1302 - acc: 0.9531
2601
    13/168 [=>.....] - ETA: 1:34 - loss: 0.1226 - acc: 0.9567
2602
    14/168 [=>.....] - ETA: 1:34 - loss: 0.1207 - acc: 0.9563
15/168 [=>.....] - ETA: 1:33 - loss: 0.1204 - acc: 0.9567
2603
2604
    16/168 [=>.....] - ETA: 1:33 - loss: 0.1265 - acc: 0.9555
2605
    17/168 [==>.....] - ETA: 1:32 - loss: 0.1284 - acc: 0.9544
18/168 [==>.....] - ETA: 1:32 - loss: 0.1273 - acc: 0.9556
2606
2607
    19/168 [==>.....] - ETA: 1:31 - loss: 0.1229 - acc: 0.9566
2608

      20/168 [==>.....] - ETA: 1:30 - loss: 0.1221 - acc: 0.9569

      21/168 [==>.....] - ETA: 1:30 - loss: 0.1240 - acc: 0.9560

      22/168 [==>.....] - ETA: 1:29 - loss: 0.1237 - acc: 0.9563

2609
2610
2611
    23/168 [===>.....] - ETA: 1:29 - loss: 0.1274 - acc: 0.9549
2612
    24/168 [===>.....] - ETA: 1:28 - loss: 0.1315 - acc: 0.9536
2613
    25/168 [===>. . . . . ] - ETA: 1:27 - loss: 0.1330 - acc: 0.9530 26/168 [===>. . . . ] - ETA: 1:27 - loss: 0.1303 - acc: 0.9538 27/168 [===>. . . . . ] - ETA: 1:26 - loss: 0.1296 - acc: 0.9542
2614
2615
2616
    28/168 [====> ... ] - ETA: 1:25 - loss: 0.1283 - acc: 0.9549
29/168 [====> ... ] - ETA: 1:25 - loss: 0.1296 - acc: 0.9552
2617
2618
    30/168 [====>.....] - ETA: 1:24 - loss: 0.1303 - acc: 0.9554
2619
    31/168 [====>...] - ETA: 1:24 - loss: 0.1307 - acc: 0.9552
32/168 [====>...] - ETA: 1:23 - loss: 0.1349 - acc: 0.9535
2620
2621
    33/168 [====>.....] - ETA: 1:22 - loss: 0.1353 - acc: 0.9530
2622
    34/168 [====>.....] - ETA: 1:22 - loss: 0.1337 - acc: 0.9533
2623
    35/168 [=====>....] - ETA: 1:21 - loss: 0.1310 - acc: 0.9546 36/168 [=====>.....] - ETA: 1:20 - loss: 0.1289 - acc: 0.9556
2624
2625
2626
    37/168 [=====>.....] - ETA: 1:20 - loss: 0.1304 - acc: 0.9554
    38/168 [=====> ... ] - ETA: 1:19 - loss: 0.1280 - acc: 0.9566
39/168 [=====> ... ] - ETA: 1:19 - loss: 0.1269 - acc: 0.9571
2627
2628
    40/168 [=====> ... ] - ETA: 1:18 - loss: 0.1263 - acc: 0.9572
41/168 [=====> ... ] - ETA: 1:17 - loss: 0.1244 - acc: 0.9579
2629
2630
    42/168 [=====> . . . . . . ] - ETA: 1:17 - loss: 0.1225 - acc: 0.9586
43/168 [=====> . . . . . . ] - ETA: 1:16 - loss: 0.1215 - acc: 0.9593
2631
2632
2633
    44/168 [=====>.....] - ETA: 1:15 - loss: 0.1203 - acc: 0.9594
    45/168 [======> . . . . . . ] - ETA: 1:15 - loss: 0.1205 - acc: 0.9594 46/168 [======> . . . . . . . ] - ETA: 1:14 - loss: 0.1200 - acc: 0.9595
2634
2635
    47/168 [======>.....] - ETA: 1:14 - loss: 0.1202 - acc: 0.9593
2636
    48/168 [======>.....] - ETA: 1:13 - loss: 0.1189 - acc: 0.9596
2637
    49/168 [======>.....] - ETA: 1:12 - loss: 0.1185 - acc: 0.9597
2638
    50/168 [======>.....] - ETA: 1:12 - loss: 0.1172 - acc: 0.9600
2639
    51/168 [=======>....] - ETA: 1:11 - loss: 0.1154 - acc: 0.9608
2640
    52/168 [=======>....] - ETA: 1:11 - loss: 0.1159 - acc: 0.9601 53/168 [=======>....] - ETA: 1:10 - loss: 0.1157 - acc: 0.9594
2641
2642
    54/168 [======>.....] - ETA: 1:09 - loss: 0.1155 - acc: 0.9597
2643
    2644
2645
2646
    57/168 [======>.....] - ETA: 1:08 - loss: 0.1125 - acc: 0.9607
    58/168 [=======>....] - ETA: 1:07 - loss: 0.1125 - acc: 0.9608
2647
    59/168 [=======>....] - ETA: 1:06 - loss: 0.1116 - acc: 0.9610 60/168 [=======>....] - ETA: 1:06 - loss: 0.1108 - acc: 0.9615
2648
2649
    61/168 [=======>.....] - ETA: 1:05 - loss: 0.1102 - acc: 0.9617
2650
2651
    62/168 [=======>.....] - ETA: 1:04 - loss: 0.1098 - acc: 0.9617
```

```
63/168 [=======>.....] - ETA: 1:04 - loss: 0.1089 - acc: 0.9621
2652
 64/168 [========>.....] - ETA: 1:03 - loss: 0.1094 - acc: 0.9619 65/168 [======>.....] - ETA: 1:03 - loss: 0.1085 - acc: 0.9621
2653
2654
 2655
2656
2657
 69/168 [=======>....] - ETA: 1:00 - loss: 0.1106 - acc: 0.9621
 2659
2660
2661
2662
2663
2664
 76/168 [=======>....] - ETA: 56s - loss: 0.1138 - acc: 0.9609
2665
 2666
2667
 2668
2669
2670
2671
2672
 2673
2674
 86/168 [=======>....] - ETA: 50s - loss: 0.1172 - acc: 0.9593
2675
 2676
2677
2678
 2679
2680
2681
 93/168 [=======>:....] - ETA: 45s - loss: 0.1164 - acc: 0.9601
2682
 2683
2684
2685 96/168 [===========>.....] - ETA: 44s - loss: 0.1164 - acc: 0.9600
2689 100/168 [========>, .............] - ETA: 41s - loss: 0.1150 - acc: 0.9604
2696 107/168 [============>.....] - ETA: 37s - loss: 0.1141 - acc: 0.9604
2699 110/168 [============>....] - ETA: 35s - loss: 0.1136 - acc: 0.9606
2700 111/168 [============>.....] - ETA: 34s - loss: 0.1129 - acc: 0.9608
2710 121/168 [=============>.....] - ETA: 28s - loss: 0.1106 - acc: 0.9622
2717 128/168 [===============>.....] - ETA: 24s - loss: 0.1105 - acc: 0.9626
```

```
2752 163/168 [===================================] - ETA: 3s - loss: 0.1044 - acc: 0.9649
0411 - val_acc: 0.9871
2758 Epoch 17/21
2759
   2760
2761
   2762
2763
2764
   6/168 [>.....] - ETA: 1:40 - loss: 0.0985 - acc: 0.9667
2765
   7/168 [>.....] - ETA: 1:39 - loss: 0.0905 - acc: 0.9696
2766
   2767
2768
2769
2770
2771
   13/168 [=>.....] - ETA: 1:35 - loss: 0.1037 - acc: 0.9654
2772
   14/168 [=>......] - ETA: 1:34 - loss: 0.1018 - acc: 0.9643
15/168 [=>......] - ETA: 1:33 - loss: 0.0974 - acc: 0.9658
2773
2774
   16/168 [=>.....] - ETA: 1:33 - loss: 0.0974 - acc: 0.9656
17/168 [==>.....] - ETA: 1:32 - loss: 0.0952 - acc: 0.9669
2775
2776
   18/168 [==>....] - ETA: 1:32 - loss: 0.0956 - acc: 0.9667
19/168 [==>....] - ETA: 1:31 - loss: 0.0992 - acc: 0.9658
2777
2778
2779
   20/168 [==>.....] - ETA: 1:30 - loss: 0.1013 - acc: 0.9656
   21/168 [==>......] - ETA: 1:30 - loss: 0.0974 - acc: 0.9673
22/168 [==>......] - ETA: 1:29 - loss: 0.0957 - acc: 0.9676
2780
2781
   23/168 [===>....] - ETA: 1:28 - loss: 0.0941 - acc: 0.9679
24/168 [===>....] - ETA: 1:28 - loss: 0.0968 - acc: 0.9672
2782
2783
   25/168 [===>...] - ETA: 1:27 - loss: 0.0955 - acc: 0.9675
26/168 [===>...] - ETA: 1:27 - loss: 0.1025 - acc: 0.9673
2784
2785
2786
   27/168 [===>.....] - ETA: 1:26 - loss: 0.1005 - acc: 0.9676
   28/168 [====> ... ] - ETA: 1:25 - loss: 0.0983 - acc: 0.9688 29/168 [====> ... ] - ETA: 1:25 - loss: 0.0985 - acc: 0.9690
2787
2788
   30/168 [====>.....] - ETA: 1:24 - loss: 0.0974 - acc: 0.9696
2789
   31/168 [====>....] - ETA: 1:24 - loss: 0.1013 - acc: 0.9677
2790
   32/168 [====>.....] - ETA: 1:23 - loss: 0.1029 - acc: 0.9676
2791
   33/168 [====>.....] - ETA: 1:22 - loss: 0.1011 - acc: 0.9682
2792
2793
   34/168 [=====>.....] - ETA: 1:22 - loss: 0.1010 - acc: 0.9684
   35/168 [=====>....] - ETA: 1:21 - loss: 0.1050 - acc: 0.9675
36/168 [=====>....] - ETA: 1:20 - loss: 0.1033 - acc: 0.9681
2794
2795
   2796
2797
2798
2799
   40/168 [=====>.....] - ETA: 1:18 - loss: 0.1005 - acc: 0.9684
   41/168 [=====>....] - ETA: 1:17 - loss: 0.1054 - acc: 0.9668
2800
   42/168 [======>....] - ETA: 1:17 - loss: 0.1060 - acc: 0.9664
43/168 [======>.....] - ETA: 1:16 - loss: 0.1051 - acc: 0.9663
2801
2802
   44/168 [=====>.....] - ETA: 1:16 - loss: 0.1065 - acc: 0.9656
2803
2804
   45/168 [======>.....] - ETA: 1:15 - loss: 0.1074 - acc: 0.9653
```

File - Run train_network_generators						
2805	Д6/168	[======> 1	– FTΔ·	1:14 - loss: 0.1076 - acc: 0.9652		
1						
2806	47/168	[======>]	- EIA:	1:14 - loss: 0.1072 - acc: 0.9652		
2807	48/168	[=====>]	- ETA:	1:13 - loss: 0.1071 - acc: 0.9648		
2808				1:13 - loss: 0.1060 - acc: 0.9653		
2809				1:12 - loss: 0.1070 - acc: 0.9653		
2810				1:11 - loss: 0.1070 - acc: 0.9654		
2811	52/168	[======>]	- ETA:	1:11 - loss: 0.1062 - acc: 0.9656		
2812				1:10 - loss: 0.1068 - acc: 0.9653		
2813				1:09 - loss: 0.1067 - acc: 0.9655		
2814	55/168	[======>]	- ETA:	1:09 - loss: 0.1071 - acc: 0.9650		
2815	56/168	[======>]	- FTA:	1:08 - loss: 0.1067 - acc: 0.9652		
2816				1:08 - loss: 0.1063 - acc: 0.9656		
2817	58/168	[======>,]	- EIA:	1:07 - loss: 0.1073 - acc: 0.9649		
2818	59/168	[======>]	- ETA:	1:06 - loss: 0.1060 - acc: 0.9655		
2819				1:06 - loss: 0.1058 - acc: 0.9654		
1				1:05 - loss: 0.1067 - acc: 0.9652		
2820	01/100	[- LIA.	1.03 - t055. 0.1007 - acc. 0.9032		
2821	62/168	[=======>]	- ETA:	1:05 - loss: 0.1064 - acc: 0.9651		
2822	63/168	[=======>]	- ETA:	1:04 - loss: 0.1054 - acc: 0.9655		
2823				1:03 - loss: 0.1047 - acc: 0.9656		
2824				1:03 - loss: 0.1047 - acc: 0.9656		
2825				1:02 - loss: 0.1043 - acc: 0.9657		
2826	67/168	[=======>1	- ETA:	1:01 - loss: 0.1040 - acc: 0.9659		
	68/168	[======================================	- FT∆ ·	1:01 - loss: 0.1042 - acc: 0.9658		
2828				1:00 - loss: 0.1035 - acc: 0.9661		
2829				1:00 - loss: 0.1034 - acc: 0.9663		
2830		[=======>]				
2831		[======================================				
		[=======>]				
2833	74/168	[======>]	- ETA:	57s - loss: 0.1034 - acc: 0.9659		
2834		[======>]				
2835		[========>]				
2836		[=======>]				
2837	78/168	[=======>]	- ETA:	55s - loss: 0.1030 - acc: 0.9657		
2838	79/168	[=======>]	- ETA:	54s - loss: 0.1034 - acc: 0.9653		
2839		[========>]				
1						
2840		[=======>]				
2841	82/168	[=======>]	- ETA:	52s - loss: 0.1026 - acc: 0.9657		
2842	83/168	[=======>]	- ETA:	52s - loss: 0.1022 - acc: 0.9657		
2843		[======>]				
	-	[======>]				
2845		[=======>]				
2846	87/168	[======>]	- ETA:	49s - loss: 0.1026 - acc: 0.9654		
	88/168	[=======>]	- FTΔ·	119c - locc: 0 1027 - acc: 0 9652		
2848		[=======>]				
2849	90/168	[======================================	- ETA:	47s - Loss: 0.1024 - acc: 0.9656		
2850	91/168	[========>,]	- ETA:	47s - loss: 0.1017 - acc: 0.9659		
2851	92/168	[======================================	- FTA:	46s - loss: 0.1022 - acc: 0.9656		
2052	02/160	[======================================	_ ETA:	UES - loss: 0.1020 - 200: 0.0650		
2032	93/100	[- LIA.	455 - 1055. 0.1020 - acc. 0.9039		
		[======================================				
		[=======>]				
2855	96/168	[=======>]	- ETA:	44s - loss: 0.1007 - acc: 0.9660		
2856		[======================================				
	00/100	[113c - loca: 0 1000 - 200: 0 0657		
		[========>]				
		[========>]				
2859	100/168	[=======>]	- ETA:	41s - loss: 0.1010 - acc: 0.9654		
		[======================================				
2961	102/169	[======================================	_ ETA:	MAC - locs: 0 0008 - 200: 0 0658		
		[========>]				
		[======>]				
		[======================================				
		[======================================				
		[======>]				
2867	108/168	[======================================	- ETA:	36s - Loss: 0.1011 - acc: 0.9655		
2868	109/168	[======>]	- ETA:	36s - loss: 0.1014 - acc: 0.9653		
		[======================================				
		[======================================				
2871	112/168	[=====>]	- ETA:	34s - Loss: 0.1021 - acc: 0.9652		
2872	113/168	[=====>]	- ETA:	33s - loss: 0.1022 - acc: 0.9647		
		[======================================				
		[======================================				
2875	116/168	[======>]	- ETA:	31s - Loss: 0.1022 - acc: 0.9649		
2876	117/168	[======>]	- ETA:	31s - loss: 0.1026 - acc: 0.9647		
		[======================================				
		[======>]				
		[======================================				
		[======>]				
		[======>:]				
2001	122/100		LIA.	200 C000. 0.1024 acc. 0.7040		

```
2882 123/168 [============>....] - ETA: 27s - loss: 0.1019 - acc: 0.9646
2885 126/168 [===============>.....] - ETA: 25s - loss: 0.1011 - acc: 0.9650
0375 - val_acc: 0.9885
2928 Epoch 18/21
2929
  1/168 [..............] - ETA: 1:43 - loss: 0.0521 - acc: 0.9750 2/168 [..............] - ETA: 1:42 - loss: 0.0589 - acc: 0.9750
2930
2931
2932
  3/168 [.....] - ETA: 1:42 - loss: 0.0690 - acc: 0.9708
  2933
2934
  2935
2936
2937
2938
2939
  10/168 [>.....] - ETA: 1:37 - loss: 0.0878 - acc: 0.9700
  11/168 [>.....] - ETA: 1:36 - loss: 0.0893 - acc: 0.9705
12/168 [=>.....] - ETA: 1:35 - loss: 0.0878 - acc: 0.9708
2940
2941
2942 13/168 [=>.....] - ETA: 1:34 - loss: 0.1020 - acc: 0.9673
  14/168 [=>.....] - ETA: 1:34 - loss: 0.1051 - acc: 0.9661
15/168 [=>.....] - ETA: 1:33 - loss: 0.1029 - acc: 0.9675
2943
2944
  16/168 [=>.....] - ETA: 1:33 - loss: 0.1011 - acc: 0.9672
2945
 17/168 [==>.....] - ETA: 1:32 - loss: 0.0981 - acc: 0.9684
2946
  18/168 [==>....] - ETA: 1:31 - loss: 0.1019 - acc: 0.9681 19/168 [==>....] - ETA: 1:31 - loss: 0.0987 - acc: 0.9684
2947
2948
  20/168 [==>.....] - ETA: 1:30 - loss: 0.0984 - acc: 0.9675
2949
  21/168 [==>.....] - ETA: 1:29 - loss: 0.0999 - acc: 0.9667
22/168 [==>.....] - ETA: 1:29 - loss: 0.1026 - acc: 0.9653
2950
2951
2952
  23/168 [===>......] - ETA: 1:28 - loss: 0.1045 - acc: 0.9652
  24/168 [===>.....] - ETA: 1:28 - loss: 0.1016 - acc: 0.9661
2953
  25/168 [===>....] - ETA: 1:27 - loss: 0.0997 - acc: 0.9670
26/168 [===>....] - ETA: 1:26 - loss: 0.0988 - acc: 0.9673
2954
2955
  27/168 [===>.....] - ETA: 1:26 - loss: 0.0996 - acc: 0.9667
2956
2957
  28/168 [====>.....] - ETA: 1:25 - loss: 0.0977 - acc: 0.9670
```

2958 29/168	File - F	Run train_n	etwork_generators		
2959 30/168	2958	29/168	[====> 1 ·	– FTΔ·	1.24 - loss: 0 0058 - acc: 0 0677
2966 31/168 ===>					
2961 32/168 ===>	2959				
2961 32/168 ===>	2960	31/168	[====>]	– ETA:	1:23 - loss: 0.0940 - acc: 0.9685
2962 33/168	2961				
2964 35/168 ====					
35/168					
2965 37/168	2963	34/168	[=====>] ·	- ETA:	1:21 - loss: 0.0927 - acc: 0.9691
2965 37/168	2964	35/168	[====>]	- FTA:	1:21 - loss: 0.0917 - acc: 0.9696
2966 37/168 ====	_				
2966 39/166 ====					
2968 39/168	2966	37/168	[=====>] ·	<pre>– ETA:</pre>	1:20 - loss: 0.0917 - acc: 0.9696
2968 39/168	2967	38/168	[====>]	- ETA:	1:19 - loss: 0.0918 - acc: 0.9697
2969 49/166					
1976 11/166					
1	2969	40/168	[=====>] ·	- ETA:	1:18 - loss: 0.0907 - acc: 0.9700
1	2970	41/168	[=====>] -	- ETA:	1:17 - loss: 0.0915 - acc: 0.9701
1971 1971 1973 1973 1974 1975					
1973 141/168	1				
1	2972	43/168	[=====>	- ETA:	1:16 - loss: 0.0889 - acc: 0.9709
1971 18/168	2973	44/168	[=====>] ·	- ETA:	1:15 - loss: 0.0907 - acc: 0.9707
2975 46/168	207/1				
2977 48/168	1				
2977 48/168	2975	46/168	[======>]	- EIA:	1:14 - Loss: 0.0916 - acc: 0.9707
2977 48/168	2976	47/168	[=====>] ·	- ETA:	1:14 - loss: 0.0907 - acc: 0.9710
2978 49/168					
2979 59/168 ====> FIA: 1:12 Loss: 0.8981 acc: 0.9712					
2986 51/168					
2986 51/168	2979	50/168	[======>]	- ETA:	1:12 - loss: 0.0891 - acc: 0.9712
2981 \$2/168	2986				
2925 33/168	1				
2984 55/168					
2984 55/168	2982				
2948 55/168 =====> FEA: 1:09 105S: 0.0897 acc: 0.9714 2965 56/168 ====> FEA: 1:08 105S: 0.09901 acc: 0.9704 2966 57/168 =====> FEA: 1:07 105S: 0.0926 acc: 0.9708 2978 58/168 =====> FEA: 1:07 105S: 0.0926 acc: 0.9709 2988 59/168 =====> FEA: 1:06 105S: 0.0926 acc: 0.9709 2988 59/168 ===== FEA: 1:06 105S: 0.0926 acc: 0.9709 2989 69/168 ==== FEA: 1:06 105S: 0.0925 acc: 0.9708 2990 61/168 ===== FEA: 1:06 105S: 0.0925 acc: 0.9708 2990 61/168 ===== FEA: 1:06 105S: 0.0925 acc: 0.9708 2991 62/168 ==== FEA: 1:06 105S: 0.0925 acc: 0.9702 2992 63/168 ===== FEA: 1:06 105S: 0.0925 acc: 0.9712 2993 64/168 ===== FEA: 1:08 105S: 0.0925 acc: 0.9712 2993 64/168 ==== FEA: 1:08 105S: 0.0925 acc: 0.9715 2994 65/168 ==== FEA: 1:08 105S: 0.0925 acc: 0.9715 2995 66/168 ==== FEA: 1:08 105S: 0.0925 acc: 0.9716 2996 67/168 ==== FEA: 1:08 105S: 0.0925 acc: 0.9716 2997 68/168 ==== FEA: 1:08 105S: 0.0925 acc: 0.9716 2998 69/168 ==== FEA: 1:08 105S: 0.0925 acc: 0.9716 2998 69/168 ==== FEA: 1:08 105S: 0.0925 acc: 0.9716 2998 69/168 ==== FEA: 1:08 105S: 0.0925 acc: 0.9716 2998 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9716 2998 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9712 2998 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9712 2998 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9712 2998 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9712 2998 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9712 2999 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9712 2999 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9712 2990 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9712 2991 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.9713 2992 69/168 === FEA: 1:08 105S: 0.0925 acc: 0.971	2983	54/168	[======>,,	- ETA:	1:09 - loss: 0.0908 - acc: 0.9708
2985 56/168					
2986 57/168					
1987 58/168	2985				
1987 58/168	2986				
2988 59/168 ======> FTA: 1:06 - Loss: 0.0926 - acc: 0.9708 2998 61/168 E====> FTA: 1:06 - Loss: 0.0926 - acc: 0.9708 2999 61/168 E===> FTA: 1:05 - Loss: 0.0935 - acc: 0.9709 2991 62/168 E===> FTA: 1:04 - Loss: 0.0932 - acc: 0.9712 2992 63/168 E====> FTA: 1:04 - Loss: 0.0932 - acc: 0.9712 2993 64/168 E====> FTA: 1:04 - Loss: 0.0928 - acc: 0.9712 2994 65/168 E====> FTA: 1:04 - Loss: 0.0928 - acc: 0.9712 2995 66/168 E====> FTA: 1:03 - Loss: 0.0918 - acc: 0.9717 2995 66/168 E====> FTA: 1:03 - Loss: 0.0918 - acc: 0.9717 2995 66/168 E====> FTA: 1:03 - Loss: 0.0908 - acc: 0.9716 2996 67/168 E====> FTA: 1:04 - Loss: 0.0908 - acc: 0.9719 2995 66/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9719 2996 67/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9719 2997 66/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9719 2998 69/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9711 2999 70/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9721 2999 70/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9712 2999 70/168 E======> FTA: 1:04 - Loss: 0.0899 - acc: 0.9712 2990 70/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9712 2991 70/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9712 3000 71/168 E=====> FTA: 1:04 - Loss: 0.0899 - acc: 0.9712 3010 71/168 E======> FTA: 1:04 - Loss: 0.0909 - acc: 0.9710 3010 71/168 E========> FTA: 1:04 - Loss: 0.0909 - acc: 0.9711 3010 71/168 E===================================	2987				
2989 69/168					
2996 61/168 [=======] FTA: 1:65 - loss: 0.0932 - acc: 0.9710 2991 62/168 [======] FTA: 1:64 - loss: 0.0932 - acc: 0.9712 2992 63/168 [======] FTA: 1:64 - loss: 0.0932 - acc: 0.9712 2993 64/168 [======] FTA: 1:63 - loss: 0.0918 - acc: 0.9715 2994 65/168 [=====] FTA: 1:63 - loss: 0.0912 - acc: 0.9717 2995 66/168 [=====] FTA: 1:63 - loss: 0.0912 - acc: 0.9717 2995 66/168 [=====] FTA: 1:63 - loss: 0.0912 - acc: 0.9717 2995 66/168 [=====] FTA: 1:61 - loss: 0.0995 - acc: 0.9716 2997 68/168 [=====] FTA: 1:61 - loss: 0.0995 - acc: 0.9716 2997 68/168 [=====] FTA: 1:60 - loss: 0.0995 - acc: 0.9711 2998 69/168 [=====] FTA: 1:60 - loss: 0.0009 - acc: 0.9721 2999 69/168 [=====] FTA: 1:60 - loss: 0.0009 - acc: 0.9721 2999 70/168 [=====] FTA: 59 - loss: 0.0009 - acc: 0.9721 3000 71/168 [=====] FTA: 50 - loss: 0.0009 - acc: 0.9720 3001 72/168 [=====] FTA: 50 - loss: 0.0009 - acc: 0.9719 3002 73/168 [=====] FTA: 50 - loss: 0.0009 - acc: 0.9716 3003 74/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9713 3004 75/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9713 3005 76/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9713 3006 77/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9713 3007 78/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9713 3008 78/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9713 3009 80/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9714 3000 80/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9714 3010 82/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9715 3011 82/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9714 3011 82/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9706 3011 82/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9706 3011 82/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9709 3011 82/168 [======] FTA: 50 - loss: 0.0009 - acc: 0.9709 3011 82/168 [=======] FTA: 50 - loss: 0.0009 - acc: 0.9709 3012 88/168 [=======] FTA: 50 - loss: 0.0009					
2991 62/168 ========>	2989				
2991 62/168 ========>	2990	61/168	[======>,]	- ETA:	1:05 - loss: 0.0935 - acc: 0.9709
2992 63/168	2991				
2993 64/168 =======>					
2994 65/168 =======>	1				
2995 66/168	2993	64/168	[=======>]	– ETA:	1:03 - loss: 0.0918 - acc: 0.9715
2995 66/168	2994				
Personal Content Personal Co		66/160	[_ ETA:	1:02 - loss: 0.0005 - 200: 0.0720
Depth Dept	_				
Perfect Perf	2996				
Perfect Perf	2997	68/168	[=======>]	- ETA:	1:01 - loss: 0.0899 - acc: 0.9719
2999 70/168	2998	69/168	Ī=======>	- FTΔ·	1:00 - loss: 0 0892 - acc: 0 9721
3000 71/168		70/160	[FO. loss, 0.0002 acc. 0.0721
3601 72/168 [====================================		70/100		- LIA.	395 - LUSS. 0.0092 - acc. 0.9721
3002 73/168 [====================================	3000	71/168	[=======>]	- ETA:	59s - loss: 0.0894 - acc: 0.9720
3002 73/168 [====================================	3001	72/168	[=======>]	- ETA:	58s - loss: 0.0900 - acc: 0.9719
3003 74/168 ========>	3002	73/168	Γ=======> 1 ·	– FTΔ·	58s - loss: 0 0906 - acc: 0 9716
3004 75/168	1				
3005 76/168 ===================================		,			
3006 77/168	3004				
3006 77/168	3005	76/168	[=======>,]	- ETA:	56s - loss: 0.0908 - acc: 0.9712
3007 78/168 C	3006				
Section Sect	1				
3009 80/168	1				
Signature Sign	3008				
Signature Sign	3009	80/168	[=======>]	- ETA:	53s - loss: 0.0911 - acc: 0.9711
3011 82/168		81/168	[======================================	- FT∆ ·	53s - loss: 0 0904 - acc: 0 9715
3012 83/168 ===================================	1	02/160	[_ ETA:	53c - locs: 0.0007 - 200: 0.0712
Style Styl					
3014 85/168	3012				
3014 85/168	3013	84/168	[========>1	- ETA:	51s - loss: 0.0921 - acc: 0.9702
3015 86/168 [====================================		-			
3016 87/168 ===================================	1				
3017 88/168 [====================================	1				
3017 88/168 [====================================	3016				
3018 89/168 [====================================	3017				
3019 90/168 [====================================	1				
3020 91/168 [====================================					
3021 92/168 [====================================	1				
3021 92/168 [====================================	3020	91/168	[=======>] ·	- ETA:	47s - Loss: 0.0928 - acc: 0.9698
3022 93/168 [====================================	3021	92/168	[=======>]	- ETA:	46s - loss: 0.0927 - acc: 0.9697
3023 94/168 [====================================					
3024 95/168 [====================================					
3025 96/168 [====================================					
3026 97/168 [====================================	3024				
3026 97/168 [====================================	3025				
3027 98/168 [====================================					
3028 99/168 [====================================					
3029 100/168 [====================================					
3030 101/168 [====================================					
3030 101/168 [====================================	3029	100/168	[======================================	- ETA:	41s - loss: 0.0925 - acc: 0.9703
3031 102/168 [===========>] - ETA: 40s - loss: 0.0922 - acc: 0.9702 3032 103/168 [=========>] - ETA: 39s - loss: 0.0921 - acc: 0.9703 3033 104/168 [==========>] - ETA: 39s - loss: 0.0919 - acc: 0.9701					
3032 103/168 [===========>] - ETA: 39s - loss: 0.0921 - acc: 0.9703 3033 104/168 [===========>] - ETA: 39s - loss: 0.0919 - acc: 0.9701					
3033 104/168 [==========>] - ETA: 39s - loss: 0.0919 - acc: 0.9701					
3034 105/168 [==========>] - ETA: 38s - loss: 0.0926 - acc: 0.9699	3033	104/168	[======>]	- ETA:	39s - loss: 0.0919 - acc: 0.9701
255. 3.320 460. 0.333					
	555-4				

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3035 106/168 [===========>.....] - ETA: 37s - loss: 0.0924 - acc: 0.9699
3038 109/168 [============>.....] - ETA: 36s - loss: 0.0925 - acc: 0.9700
3086 157/168 [===================================>..] - ETA: 6s - loss: 0.1012 - acc: 0.9668
0391 - val_acc: 0.9868
3098 Epoch 19/21
3099
 3100
3101
 3102
3103
3104
3105
 6/168 [>.....] - ETA: 1:39 - loss: 0.1528 - acc: 0.9625
 7/168 [>.....] - ETA: 1:38 - loss: 0.1414 - acc: 0.9661
3106
 8/168 [>.....] - ETA: 1:37 - loss: 0.1375 - acc: 0.9672
9/168 [>.....] - ETA: 1:37 - loss: 0.1332 - acc: 0.9667
3107
3108
 10/168 [>.....] - ETA: 1:36 - loss: 0.1360 - acc: 0.9688
3109
3110 11/168 [>................] - ETA: 1:35 - loss: 0.1295 - acc: 0.9693
```

1111 11/168 Part Part	File - R	tun train_n	etwork_generators		
13113 13/168 =	3111	12/168	[=s] ·	– FTΔ·	1:35 - loss: 0 1360 - acc: 0 9677
1113 11/168 2					
15/168					
115 16/168					
117168	3114	15/168	[=>]	- ETA:	1:33 - loss: 0.1315 - acc: 0.9658
117168	3115	16/168	[=>]	- ETA:	1:32 - loss: 0.1310 - acc: 0.9648
11 18 18 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 19 18 18					
1916					
1910 20/168 ==>	_				
1212 27/168 ==>					
1211 22/168 ===	_				
1212 23/168	3120	21/168	[==>]	- ETA:	1:29 - loss: 0.1215 - acc: 0.9649
1212 23/168	3121	22/168	[==>]	- ETA:	1:29 - loss: 0.1224 - acc: 0.9636
1212 291/66 E=>					
124 25/168 ==> = ETA: 1:27 1055: 0.1290 acc: 0.9635 3125 26/168 ==> = ETA: 1:26 1055: 0.1194 acc: 0.9639 3126 27/168 ==> = ETA: 1:26 1055: 0.1194 acc: 0.9633 3127 28/168 ==> = ETA: 1:26 1055: 0.1194 acc: 0.9633 3127 28/168 ==> = ETA: 1:25 1055: 0.1194 acc: 0.9633 3128 29/168 === = ETA: 1:25 1055: 0.1194 acc: 0.9638 3129 39/168 === = ETA: 1:26 1055: 0.1195 acc: 0.9648 3139 31/168 === = ETA: 1:27 acc: 0.9638 3139 31/168 === = ETA: 1:28 acc: 0.9648 3139 31/168 === = ETA: 1:28 acc: 0.9648 3139 31/168 === = ETA: 1:22 acc: 0.9648 3139 31/168 === = ETA: 1:22 acc: 0.9648 3133 31/168 === = ETA: 1:22 acc: 0.9648 3135 31/168 === = ETA: 1:22 acc: 0.9648 3133 31/168 === = ETA: 1:20 acc: 0.9648 3133 31/168 === = ETA: 1:20 acc: 0.9648 3133 31/168 === = ETA: 1:20 acc: 0.9648 3133 31/168 === = ETA: 1:10 acc: 0.9649 3134 31/168 === = ETA: 1:10 acc: 0.9669 3134 31/168 === = ETA: 1:10 acc: 0.9669 3134 31/168 === = ETA: 1:10 acc:					
1215 26/168 ==>					
1216 277/168 2	_				
127 28/168					
1218 29/168	3126	27/168	[===>]	- ETA:	1:26 - loss: 0.1144 - acc: 0.9653
1218 29/168	3127	28/168	[====>]	- ETA:	1:25 - loss: 0.1137 - acc: 0.9652
1219 30/166	3128				
1313 31/168					
1311 32/168 ===> - ETA : 1:22 - Loss 0.1126 - acc 0.9633 1312 33/168 ===> - ETA : 1:22 - Loss 0.1126 - acc 0.9633 1313 33/168 ===> - ETA : 1:22 - Loss 0.1118 - acc 0.9632 1313 33/168 ===> - ETA : 1:21 - Loss 0.1160 - acc 0.9636 1315 36/168 ===> - ETA : 1:22 - Loss 0.1180 - acc 0.9636 1315 36/168 ===> - ETA : 1:20 - Loss 0.1686 - acc 0.9635 1316 37/168 ===> - ETA : 1:20 - Loss 0.1686 - acc 0.9635 1317 38/168 ===> - ETA : 1:20 - Loss 0.1696 - acc 0.9641 1318 39/168 ===> - ETA : 1:19 - Loss 0.1697 - acc 0.9641 1318 39/168 ===> - ETA : 1:19 - Loss 0.1697 - acc 0.9641 1314 42/168 ===> - ETA : 1:17 - Loss 0.1693 - acc 0.9647 1314 42/168 ===> - ETA : 1:17 - Loss 0.1694 - acc 0.9649 1314 43/168 ===> - ETA : 1:17 - Loss 0.1625 - acc 0.9657 1314 44/168 ===> - ETA : 1:17 - Loss 0.1626 - acc 0.9657 1314 44/168 ===> - ETA : 1:14 - Loss 0.1626 - acc 0.9657 1314 44/168 ===> - ETA : 1:14 - Loss 0.1626 - acc 0.9658 1314 44/168 ===> - ETA : 1:14 - Loss 0.1626 - acc 0.9658 1314 44/168 ===> - ETA : 1:14 - Loss 0.1627 - acc 0.9658 1314 44/168 ===> - ETA : 1:14 - Loss 0.1627 - acc 0.9658 1314 44/168 ===> - ETA : 1:14 - Loss 0.1627 - acc 0.9658 1314 44/168 ====> - ETA : 1:14 - Loss 0.1627 - acc 0.9668 1315 54/168 =====> - ETA : 1:14 - Loss 0.1627 - acc 0.9668 1316 54/168 ====== - ETA : 1:14 - Loss 0.1627 - acc 0.9668 1319 54/168 ======= - ETA : 1:14 - Loss 0.1627 - acc 0.9668 1319 54/168 ====== - ETA : 1:14 - Loss 0.1627 - acc 0.9668 1315 54/168 ====== - ETA : 1:14 - Loss 0.1627 - acc 0.9668 1315 54/168 ====== - ETA : 1:14 - Loss 0.1627 - acc 0.9668 1315 54/168 ====== - ETA : 1:14 - Loss 0.1627 - acc 0.9668 1315 54/168 ====== - ETA : 1:14 -					
331/36					
1313 34/168					
1313 34/168	3132	33/168	[====>]	- ETA:	1:22 - loss: 0.1125 - acc: 0.9633
1314 35/168 ====>					
1315 36/168					
3171 88					
1313 38/168					
1318 39/168					
1318 39/168	3137	38/168	[====>]	- ETA:	1:19 - loss: 0.1074 - acc: 0.9641
1319 49/168					
3144 41/168 ====>					
3142 43/168 ====>					
3144 44/168					
3144 45/168 =====> - FTA: 1:15 - Loss: 0.1015 - acc: 0.9658 3145 46/168 ====> - FTA: 1:14 - Loss: 0.1027 - acc: 0.9658 3147 48/168 ====> - FTA: 1:14 - Loss: 0.1016 - acc: 0.9660 3147 48/168 ====> - FTA: 1:13 - Loss: 0.1016 - acc: 0.9660 3148 49/168 ====> - FTA: 1:12 - Loss: 0.0992 - acc: 0.9668 3149 56/168 ====> - FTA: 1:12 - Loss: 0.0997 - acc: 0.9668 3150 51/168 ====> - FTA: 1:11 - Loss: 0.0997 - acc: 0.9668 3150 51/168 ====> - FTA: 1:11 - Loss: 0.1004 - acc: 0.9669 3151 52/168 ====> - FTA: 1:11 - Loss: 0.1023 - acc: 0.9663 3152 53/168 ====> - FTA: 1:11 - Loss: 0.1023 - acc: 0.9663 3153 54/168 ====> - FTA: 1:10 - Loss: 0.1023 - acc: 0.9662 3154 55/168 ====> - FTA: 1:10 - Loss: 0.1023 - acc: 0.9662 3155 55/168 ====> - FTA: 1:10 - Loss: 0.1024 - acc: 0.9662 3155 55/168 ====> - FTA: 1:10 - Loss: 0.1024 - acc: 0.9662 3155 55/168 ====> - FTA: 1:09 - Loss: 0.1024 - acc: 0.9662 3157 55/168 =====> - FTA: 1:08 - Loss: 0.1024 - acc: 0.9666 3158 59/168 =====> - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3159 66/168 =====> - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3160 62/168 =====> - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3161 62/168 =====> - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3162 62/168 ======> - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3163 64/168 ======> - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3163 64/168 ======> - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3164 65/168 ======= - FTA: 1:08 - Loss: 0.1024 - acc: 0.9666 3165 66/168 ======= - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3166 66/168 ======= - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3166 66/168 ======= - FTA: 1:06 - Loss: 0.1024 - acc: 0.9666 3166 66/168 ======= - FTA: 1:09 - Loss: 0.1024 - acc: 0.9666 3166 66/168 ======= - FTA: 1:04 - Loss: 0.1024 - acc: 0.9666 3166 66/168 ===					
3145 46/168 [=====>					
3140 47/168 [=====>] = ETA: 1:14 - loss: 0.1016 - acc: 0.9660	3144	45/168	[======>]	- ETA:	1:15 - loss: 0.1015 - acc: 0.9658
3140 47/168 [=====>] = ETA: 1:14 - loss: 0.1016 - acc: 0.9660	3145	46/168	[======>]	- ETA:	1:14 - loss: 0.1027 - acc: 0.9658
3147 48/168					
3148 49/168 =====>					
3149 59/168		40/100	[ETA.	1.13 1055. 0.1001 acc. 0.9004
STATE STAT					
3151 52/168	_				
3152 53/168	3150	51/168	[======>]	- ETA:	1:11 - loss: 0.1004 - acc: 0.9669
3153 54/168	3151	52/168	[======>]	- ETA:	1:11 - loss: 0.1023 - acc: 0.9663
3153 54/168	3152	53/168	[======>]	- ETA:	1:10 - loss: 0.1030 - acc: 0.9658
3154 55/168					
3155 55/168		-	-		
Side Style Style					
SECTION SECT			_		
3158 59/168 ===================================			-		
3159 669/168 =======>	1				
Stop	3158	59/168	[=======>]	- ETA:	1:06 - loss: 0.1023 - acc: 0.9665
3161 62/168	3159	60/168	[=======>]	- ETA:	1:06 - loss: 0.1017 - acc: 0.9669
3161 62/168	3160				
3162 63/168 ===================================					
3163 64/168 ===================================					
3164 65/168					
3165 66/168					
3166 67/168 ===================================					
Section Sect					
Texal					
3169 70/168 ===================================	3167				
3169 70/168 ===================================	3168	69/168	[======================================	- ETA:	1:00 - loss: 0.1056 - acc: 0.9659
3170	3169				
3171 72/168 [====================================					
3172 73/168 [====================================					
3173 74/168 ===================================					
3174 75/168 [====================================					
3175 76/168 [====================================					
3176 77/168 [====================================					
3177 78/168 [====================================	3175				
3178 79/168 [====================================	3176	77/168	[=======>]	- ETA:	55s - loss: 0.1039 - acc: 0.9670
3178 79/168 [====================================	3177	78/168	[=======>	- ETA:	54s - loss: 0.1033 - acc: 0.9671
3179 80/168 [====================================					
3180 81/168 [====================================					
3181 82/168 [====================================					
3182 83/168 [====================================					
3183 84/168 [====================================					
3184 85/168 [=========>] - ETA: 50s - loss: 0.1013 - acc: 0.9671 3185 86/168 [========>] - ETA: 50s - loss: 0.1010 - acc: 0.9670 3186 87/168 [========>] - ETA: 49s - loss: 0.1015 - acc: 0.9665		83/168	[=========>]	- ETA:	51s - Loss: 0.1017 - acc: 0.9672
3184 85/168 [=========>] - ETA: 50s - loss: 0.1013 - acc: 0.9671 3185 86/168 [========>] - ETA: 50s - loss: 0.1010 - acc: 0.9670 3186 87/168 [========>] - ETA: 49s - loss: 0.1015 - acc: 0.9665	3183				
3185 86/168 [=========>] - ETA: 50s - loss: 0.1010 - acc: 0.9670 3186 87/168 [========>] - ETA: 49s - loss: 0.1015 - acc: 0.9665	3184	85/168	[======================================	- ETA:	50s - loss: 0.1013 - acc: 0.9671
3186 87/168 [========>] - ETA: 49s - loss: 0.1015 - acc: 0.9665	3185				
210, 30,100 [
	710/	00/ 100		LIA.	-03 (033, 0.1021 acc. 0.9000

```
89/168 [=======>:....] - ETA: 48s - loss: 0.1032 - acc: 0.9653
3188
90/168 [===========>.....] - ETA: 47s - loss: 0.1024 - acc: 0.9657 91/168 [=========>.....] - ETA: 46s - loss: 0.1016 - acc: 0.9661
3189
3190
3194 95/168 [==========>.....] - ETA: 44s - loss: 0.1011 - acc: 0.9664
3211 112/168 [=============>.....] - ETA: 34s - loss: 0.0983 - acc: 0.9665
```

```
0295 - val_acc: 0.9896
3268 Epoch 20/21
3269
3270
       1/168 [.....] - ETA: 1:43 - loss: 0.0324 - acc: 1.0000
      3271
3272
3273
3274
3275
3276
     3277
3278
3279
     11/168 [>.....] - ETA: 1:35 - loss: 0.0906 - acc: 0.9693
12/168 [=>.....] - ETA: 1:35 - loss: 0.0887 - acc: 0.9708
3280
3281
     13/168 [=>.....] - ETA: 1:34 - loss: 0.0858 - acc: 0.9721
14/168 [=>.....] - ETA: 1:34 - loss: 0.0874 - acc: 0.9714
15/168 [=>.....] - ETA: 1:33 - loss: 0.0861 - acc: 0.9717
3282
3283
3284
     16/168 [=>.....] - ETA: 1:32 - loss: 0.0891 - acc: 0.9711 17/168 [==>.....] - ETA: 1:32 - loss: 0.0869 - acc: 0.9713
3285
3286
     18/168 [==>.....] - ETA: 1:31 - loss: 0.0837 - acc: 0.9729
3287
     19/168 [==>.....] - ETA: 1:31 - loss: 0.0826 - acc: 0.9730 20/168 [==>.....] - ETA: 1:30 - loss: 0.0810 - acc: 0.9731
3288
3289
      21/168 [==>....] - ETA: 1:29 - loss: 0.0803 - acc: 0.9732
3290
     3291
3292
3293
      25/168 [===>.....] - ETA: 1:27 - loss: 0.0780 - acc: 0.9730
3294
     26/168 [===>....] - ETA: 1:26 - loss: 0.0773 - acc: 0.9731
27/168 [===>....] - ETA: 1:26 - loss: 0.0761 - acc: 0.9736
3295
3296
      28/168 [====>.....] - ETA: 1:25 - loss: 0.0780 - acc: 0.9723
3297
     29/168 [====> . . . . . ] - ETA: 1:24 - loss: 0.0771 - acc: 0.9724
30/168 [====> . . . . ] - ETA: 1:24 - loss: 0.0780 - acc: 0.9725
31/168 [====> . . . . . ] - ETA: 1:23 - loss: 0.0850 - acc: 0.9714
3298
3299
3300
     32/168 [====>.....] - ETA: 1:22 - loss: 0.0841 - acc: 0.9719
3301
     33/168 [====>.....] - ETA: 1:22 - loss: 0.0823 - acc: 0.9723
3302
     34/168 [=====> . . . . . ] - ETA: 1:21 - loss: 0.0813 - acc: 0.9724
35/168 [=====> . . . . ] - ETA: 1:21 - loss: 0.0822 - acc: 0.9718
36/168 [=====> . . . . . ] - ETA: 1:20 - loss: 0.0821 - acc: 0.9715
3303
3304
3305
     37/168 [=====>....] - ETA: 1:19 - loss: 0.0854 - acc: 0.9709
38/168 [=====>.....] - ETA: 1:19 - loss: 0.0856 - acc: 0.9711
3306
3307
      39/168 [=====>.....] - ETA: 1:18 - loss: 0.0881 - acc: 0.9708
3308
     40/168 [======>....] - ETA: 1:18 - loss: 0.0893 - acc: 0.9706
41/168 [=====>....] - ETA: 1:17 - loss: 0.0886 - acc: 0.9707
3309
3310
     42/168 [=====>....] - ETA: 1:16 - loss: 0.0883 - acc: 0.9708
43/168 [=====>....] - ETA: 1:16 - loss: 0.0896 - acc: 0.9703
3311
3312
     44/168 [======>....] - ETA: 1:15 - loss: 0.0897 - acc: 0.9699
45/168 [======>....] - ETA: 1:15 - loss: 0.0903 - acc: 0.9692
3313
3314
3315
     46/168 [======>.....] - ETA: 1:14 - loss: 0.0892 - acc: 0.9696
     47/168 [======>...] - ETA: 1:13 - loss: 0.0911 - acc: 0.9691
48/168 [======>...] - ETA: 1:13 - loss: 0.0905 - acc: 0.9693
3316
3317
     49/168 [======>....] - ETA: 1:12 - loss: 0.0906 - acc: 0.9694 50/168 [======>.....] - ETA: 1:11 - loss: 0.0908 - acc: 0.9695
3318
3319
     51/168 [=======>.....] - ETA: 1:11 - loss: 0.0924 - acc: 0.9686 52/168 [=======>.....] - ETA: 1:10 - loss: 0.0922 - acc: 0.9688
3320
3321
     53/168 [======>.....] - ETA: 1:10 - loss: 0.0915 - acc: 0.9689
3322
     54/168 [=======>.....] - ETA: 1:09 - loss: 0.0903 - acc: 0.9692 55/168 [=======>.....] - ETA: 1:09 - loss: 0.0899 - acc: 0.9691
3323
3324
      56/168 [=======>.....] - ETA: 1:08 - loss: 0.0917 - acc: 0.9685
3325
      57/168 [=======>.....] - ETA: 1:07 - loss: 0.0908 - acc: 0.9689
3326
      58/168 [======>.....] - ETA: 1:07 - loss: 0.0901 - acc: 0.9692
3327
     59/168 [======>.....] - ETA: 1:06 - loss: 0.0907 - acc: 0.9695
3328
      60/168 [=======>....] - ETA: 1:05 - loss: 0.0897 - acc: 0.9698
3329
     61/168 [========>....] - ETA: 1:05 - loss: 0.0890 - acc: 0.9701 62/168 [========>....] - ETA: 1:04 - loss: 0.0880 - acc: 0.9706
3330
3331
     3332
3333
3334
     66/168 [=======>.....] - ETA: 1:02 - loss: 0.0861 - acc: 0.9712
3335
      67/168 [=======>....] - ETA: 1:01 - loss: 0.0875 - acc: 0.9709
3336
     68/168 [========>....] - ETA: 1:01 - loss: 0.0870 - acc: 0.9711 69/168 [=======>....] - ETA: 1:00 - loss: 0.0860 - acc: 0.9716
3337
3338
      70/168 [=======>.....] - ETA: 59s - loss: 0.0855 - acc: 0.9716
3339
3340
     71/168 [======>.....] - ETA: 59s - loss: 0.0855 - acc: 0.9717
```

```
72/168 [=======>.....] - ETA: 58s - loss: 0.0849 - acc: 0.9719
3341
 73/168 [=========>....] - ETA: 58s - loss: 0.0853 - acc: 0.9719 74/168 [=======>....] - ETA: 57s - loss: 0.0853 - acc: 0.9721
3342
3343
 3344
3345
3346
 78/168 [=======>....] - ETA: 54s - loss: 0.0867 - acc: 0.9718
3347
 3348
3349
3350
3351
3352
3353
 3354
3355
3356
3362
3363
3371 102/168 [==============>.....] - ETA: 40s - loss: 0.0851 - acc: 0.9723
3378 109/168 [=============>.....] - ETA: 36s - loss: 0.0832 - acc: 0.9726
3385 116/168 [==============>.....] - ETA: 31s - loss: 0.0843 - acc: 0.9723
```

```
0302 - val_acc: 0.9893
3438 Epoch 21/21
3439
3440
    1/168 [.....] - ETA: 1:42 - loss: 0.0501 - acc: 0.9875
    3441
3442
    4/168 [.....] - ETA: 1:41 - loss: 0.0689 - acc: 0.9781
3443
    3444
3445
3446
    8/168 [>.....] - ETA: 1:38 - loss: 0.0693 - acc: 0.9766
3447
   3448
3449
3450
   12/168 [=>......] - ETA: 1:35 - LOSS: 0.0636 - acc: 0.9774

12/168 [=>......] - ETA: 1:35 - LOSS: 0.0672 - acc: 0.9771

13/168 [=>......] - ETA: 1:34 - LOSS: 0.0636 - acc: 0.9788

14/168 [=>......] - ETA: 1:34 - LOSS: 0.0647 - acc: 0.9777
3451
3452
3453
   15/168 [=>.....] - ETA: 1:33 - loss: 0.0641 - acc: 0.9775
3454
   3455
3456
3457
3458
3459
3460
3461
   22/168 [==>.....] - ETA: 1:29 - loss: 0.0701 - acc: 0.9761
   23/168 [===>....] - ETA: 1:28 - loss: 0.0716 - acc: 0.9750 24/168 [===>....] - ETA: 1:28 - loss: 0.0711 - acc: 0.9750
3462
3463
   25/168 [===>....] - ETA: 1:27 - loss: 0.0733 - acc: 0.9740 26/168 [===>....] - ETA: 1:27 - loss: 0.0763 - acc: 0.9736
3464
3465
   27/168 [===>...] - ETA: 1:26 - loss: 0.0748 - acc: 0.9745 28/168 [===>...] - ETA: 1:25 - loss: 0.0750 - acc: 0.9741
3466
3467
3468
   29/168 [====>.....] - ETA: 1:25 - loss: 0.0756 - acc: 0.9733
   30/168 [====> ... ] - ETA: 1:24 - loss: 0.0750 - acc: 0.9737 31/168 [====> ... ] - ETA: 1:24 - loss: 0.0736 - acc: 0.9742
3469
3470
   32/168 [====>...] - ETA: 1:23 - loss: 0.0751 - acc: 0.9742
33/168 [====>...] - ETA: 1:22 - loss: 0.0804 - acc: 0.9727
3471
3472
   34/168 [=====>....] - ETA: 1:22 - loss: 0.0796 - acc: 0.9728 35/168 [=====>....] - ETA: 1:21 - loss: 0.0788 - acc: 0.9729
3473
3474
3475
   36/168 [=====>.....] - ETA: 1:20 - loss: 0.0789 - acc: 0.9729
   37/168 [=====>...] - ETA: 1:20 - loss: 0.0809 - acc: 0.9720
38/168 [=====>...] - ETA: 1:19 - loss: 0.0797 - acc: 0.9727
3476
3477
   39/168 [====>.....] - ETA: 1:19 - loss: 0.0794 - acc: 0.9728
3478
   3479
3480
   42/168 [=====>....] - ETA: 1:17 - loss: 0.0817 - acc: 0.9720
3481
   43/168 [=====>....] - ETA: 1:16 - loss: 0.0820 - acc: 0.9721
3482
   44/168 [=====>....] - ETA: 1:16 - loss: 0.0823 - acc: 0.9719
45/168 [======>....] - ETA: 1:15 - loss: 0.0828 - acc: 0.9714
3483
3484
   3485
3486
3487
3488
   49/168 [======>.....] - ETA: 1:12 - loss: 0.0863 - acc: 0.9709
   50/168 [======>....] - ETA: 1:12 - loss: 0.0862 - acc: 0.9710
3489
   51/168 [=======>....] - ETA: 1:11 - loss: 0.0854 - acc: 0.9713
52/168 [=======>....] - ETA: 1:11 - loss: 0.0850 - acc: 0.9714
3490
3491
   53/168 [=======>.....] - ETA: 1:10 - loss: 0.0846 - acc: 0.9715
3492
3493
   54/168 [======>.....] - ETA: 1:09 - loss: 0.0850 - acc: 0.9708
```

```
55/168 [======>.....] - ETA: 1:09 - loss: 0.0838 - acc: 0.9714
3494
 56/168 [=======>.....] - ETA: 1:08 - loss: 0.0825 - acc: 0.9719 57/168 [======>.....] - ETA: 1:07 - loss: 0.0829 - acc: 0.9719
3495
3496
 3497
3498
3499
 3501
3502
3503
3504
3505
3506
 3507
3508
3509
 3510
3511
3512
3513
3514
 3515
3516
  78/168 [=======>....] - ETA: 55s - loss: 0.0800 - acc: 0.9736
3517
 3518
3519
3520
 3521
3522
3523
 85/168 [========>....] - ETA: 50s - loss: 0.0788 - acc: 0.9741
3524
 3525
3526
3527
 3528
3529
3530
  92/168 [=======> .....] - ETA: 46s - loss: 0.0784 - acc: 0.9743
3531
 3532
3533
3534
3538 99/168 [==========>.....] - ETA: 42s - loss: 0.0796 - acc: 0.9741
3541 102/168 [==========>.....] - ETA: 40s - loss: 0.0806 - acc: 0.9739
3545 106/168 [===============>.....] - ETA: 37s - loss: 0.0810 - acc: 0.9733
3552 113/168 [==============>.....] - ETA: 33s - loss: 0.0819 - acc: 0.9727
3555 116/168 [================>.......] - ETA: 31s - loss: 0.0822 - acc: 0.9726
3559 120/168 [==============>.....] - ETA: 29s - loss: 0.0822 - acc: 0.9725
```

```
3572 133/168 [==
      ========>.....] - ETA: 21s - loss: 0.0814 - acc: 0.9726
===============>....] - ETA: 11s - loss: 0.0809 - acc: 0.9728
===========>....] - ETA: 10s - loss: 0.0814 - acc: 0.9727
3589 150/168 [=
3590 151/168 [======
0209 - val_acc: 0.9932
3608 Trained model!
3609 Model: "sequential"
3610 ____
         Output Shape
3611 Layer (type)
                 Param #
------
3613 conv2d (Conv2D)
         (None, 124, 124, 32)
                 832
3615 max_pooling2d (MaxPooling2D) (None, 41, 41, 32)
                 0
3616
3617 conv2d_1 (Conv2D)
         (None, 37, 37, 64)
                 51264
3618 ____
3619 max_pooling2d_1 (MaxPooling2 (None, 18, 18, 64)
3620
3621 conv2d_2 (Conv2D)
         (None, 14, 14, 56)
                 89656
3622
3623 max_pooling2d_2 (MaxPooling2 (None, 7, 7, 56)
                 Θ
3624
3625 flatten (Flatten)
         (None, 2744)
                 0
3626
3627 dropout (Dropout)
         (None, 2744)
3628
3629 dense (Dense)
         (None, 70)
                 192150
3630
         (None, 70)
3631 dropout_1 (Dropout)
3632
3633 dense_1 (Dense)
         (None, 4)
                 284
3634 ==========
3635 Total params: 334,186
3636 Trainable params: 334,186
3637 Non-trainable params: 0
3638
3639 Saved model!
3640 Execution took 3305.316874027252 seconds
3641
3642 Process finished with exit code 0
3643
```