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1 D:\Download\Anaconda3\envs\graduation\python.exe "D:\Download\JetBrains\PyCharm 2019.3.3\plugins\python\helpers\pydev\
pydevd.py" --multiproc --qt-support=auto --client 127.0.0.1 --port 1921 --file E:/Projects/graduation/ResNet-PyTorch-CIFAR10-
master/myMain.py --res-option=B --batch-size=128 -n=7
2 pydev debugger: process 14648 is connecting
3
4 Connected to pydev debugger (build 193.6494.30)
5 Parameter count: 662826
6 Training for 40 epochs with learning rate 0.100000
7 Starting epoch 1 / 40
8 On Training Set
9 t = 100, loss = 2.0784
10 t = 200, loss = 1.9043
11 t = 300, loss = 1.8334
12 Got 11913 / 45000 correct (26.47%)
13 On Validation Set Got 1697 / 5000 correct (33.94%)
14 Starting epoch 2 / 40
15 On Training Set
16 t = 100, loss = 1.7691
17 t = 200, loss = 1.4857
18 t = 300, loss = 1.6803
19 Got 18085 / 45000 correct (40.19%)
20 On Validation Set Got 1993 / 5000 correct (39.86%)
21 Starting epoch 3 / 40
22 On Training Set
23 t = 100, loss = 1.5169
24 t = 200, loss = 1.2119
25 t = 300, loss = 1.3661
26 Got 22152 / 45000 correct (49.23%)
27 On Validation Set Got 2336 / 5000 correct (46.72%)
28 Starting epoch 4 / 40
29 On Training Set
30 t = 100, loss = 1.3403
31 t = 200, loss = 1.1605
32 t = 300, loss = 1.2116
33 Got 25259 / 45000 correct (56.13%)
34 On Validation Set Got 2900 / 5000 correct (58.00%)
35 Starting epoch 5 / 40
36 On Training Set
37 t = 100, loss = 1.1120
38 t = 200, loss = 0.9842
39 t = 300, loss = 1.0976
40 Got 27994 / 45000 correct (62.21%)
41 On Validation Set Got 2983 / 5000 correct (59.66%)
42 Starting epoch 6 / 40
43 On Training Set
44 t = 100, loss = 1.0031
45 t = 200, loss = 0.8370
46 t = 300, loss = 1.0096
47 Got 30290 / 45000 correct (67.31%)
48 On Validation Set Got 3247 / 5000 correct (64.94%)
49 Starting epoch 7 / 40
50 On Training Set
51 t = 100, loss = 1.0463
52 t = 200, loss = 0.7374
53 t = 300, loss = 0.9512
54 Got 31786 / 45000 correct (70.64%)
55 On Validation Set Got 3356 / 5000 correct (67.12%)
56 Starting epoch 8 / 40
57 On Training Set
58 t = 100, loss = 0.7180
59 t = 200, loss = 0.6568
60 t = 300, loss = 0.8250
61 Got 33220 / 45000 correct (73.82%)
62 On Validation Set Got 3626 / 5000 correct (72.52%)
63 Starting epoch 9 / 40
64 On Training Set
65 t = 100, loss = 0.8090
66 t = 200, loss = 0.6414
67 t = 300, loss = 0.7903
68 Got 34132 / 45000 correct (75.85%)
69 On Validation Set Got 3597 / 5000 correct (71.94%)
70 Starting epoch 10 / 40
71 On Training Set
72 t = 100, loss = 0.6711
73 t = 200, loss = 0.7269
74 t = 300, loss = 0.7685
75 Got 35005 / 45000 correct (77.79%)
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76 On Validation Set Got 3724 / 5000 correct (74.48%)
77 Starting epoch 11 / 40
78 On Training Set
79 t = 100, loss = 0.6746
80 t = 200, loss = 0.6512
81 t = 300, loss = 0.6127
82 Got 35631 / 45000 correct (79.18%)
83 On Validation Set Got 3901 / 5000 correct (78.02%)
84 Starting epoch 12 / 40
85 On Training Set
86 t = 100, loss = 0.5808
87 t = 200, loss = 0.5870
88 t = 300, loss = 0.6524
89 Got 36216 / 45000 correct (80.48%)
90 On Validation Set Got 3975 / 5000 correct (79.50%)
91 Starting epoch 13 / 40
92 On Training Set
93 t = 100, loss = 0.5688
94 t = 200, loss = 0.5178
95 t = 300, loss = 0.4738
96 Got 36735 / 45000 correct (81.63%)
97 On Validation Set Got 3980 / 5000 correct (79.60%)
98 Starting epoch 14 / 40
99 On Training Set
100 t = 100, loss = 0.5382
101 t = 200, loss = 0.5439
102 t = 300, loss = 0.5308
103 Got 37084 / 45000 correct (82.41%)
104 On Validation Set Got 3981 / 5000 correct (79.62%)
105 Starting epoch 15 / 40
106 On Training Set
107 t = 100, loss = 0.4443
108 t = 200, loss = 0.4760
109 t = 300, loss = 0.5429
110 Got 37524 / 45000 correct (83.39%)
111 On Validation Set Got 4034 / 5000 correct (80.68%)
112 Starting epoch 16 / 40
113 On Training Set
114 t = 100, loss = 0.4294
115 t = 200, loss = 0.5602
116 t = 300, loss = 0.5741
117 Got 37811 / 45000 correct (84.02%)
118 On Validation Set Got 4049 / 5000 correct (80.98%)
119 Starting epoch 17 / 40
120 On Training Set
121 t = 100, loss = 0.4277
122 t = 200, loss = 0.4870
123 t = 300, loss = 0.4262
124 Got 38160 / 45000 correct (84.80%)
125 On Validation Set Got 4100 / 5000 correct (82.00%)
126 Starting epoch 18 / 40
127 On Training Set
128 t = 100, loss = 0.3882
129 t = 200, loss = 0.4047
130 t = 300, loss = 0.4245
131 Got 38453 / 45000 correct (85.45%)
132 On Validation Set Got 4134 / 5000 correct (82.68%)
133 Starting epoch 19 / 40
134 On Training Set
135 t = 100, loss = 0.3903
136 t = 200, loss = 0.4676
137 t = 300, loss = 0.3575
138 Got 38650 / 45000 correct (85.89%)
139 On Validation Set Got 4139 / 5000 correct (82.78%)
140 Starting epoch 20 / 40
141 On Training Set
142 t = 100, loss = 0.3978
143 t = 200, loss = 0.4826
144 t = 300, loss = 0.3886
145 Got 38871 / 45000 correct (86.38%)
146 On Validation Set Got 4167 / 5000 correct (83.34%)
147 Starting epoch 21 / 40
148 On Training Set
149 t = 100, loss = 0.3855
150 t = 200, loss = 0.3610
151 t = 300, loss = 0.4381
152 Got 39128 / 45000 correct (86.95%)
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153 On Validation Set Got 4155 / 5000 correct (83.10%)
154 Starting epoch 22 / 40
155 On Training Set
156 t = 100, loss = 0.3138
157 t = 200, loss = 0.5043
158 t = 300, loss = 0.3598
159 Got 39215 / 45000 correct (87.14%)
160 On Validation Set Got 4103 / 5000 correct (82.06%)
161 Starting epoch 23 / 40
162 On Training Set
163 t = 100, loss = 0.3420
164 t = 200, loss = 0.4321
165 t = 300, loss = 0.4132
166 Got 39344 / 45000 correct (87.43%)
167 On Validation Set Got 4186 / 5000 correct (83.72%)
168 Starting epoch 24 / 40
169 On Training Set
170 t = 100, loss = 0.2920
171 t = 200, loss = 0.4631
172 t = 300, loss = 0.3869
173 Got 39469 / 45000 correct (87.71%)
174 On Validation Set Got 4061 / 5000 correct (81.22%)
175 Starting epoch 25 / 40
176 On Training Set
177 t = 100, loss = 0.3924
178 t = 200, loss = 0.4321
179 t = 300, loss = 0.3242
180 Got 39528 / 45000 correct (87.84%)
181 On Validation Set Got 4003 / 5000 correct (80.06%)
182 Starting epoch 26 / 40
183 On Training Set
184 t = 100, loss = 0.3443
185 t = 200, loss = 0.4085
186 t = 300, loss = 0.3839
187 Got 39747 / 45000 correct (88.33%)
188 On Validation Set Got 4190 / 5000 correct (83.80%)
189 Starting epoch 27 / 40
190 On Training Set
191 t = 100, loss = 0.3191
192 t = 200, loss = 0.3994
193 t = 300, loss = 0.3138
194 Got 39910 / 45000 correct (88.69%)
195 On Validation Set Got 4201 / 5000 correct (84.02%)
196 Starting epoch 28 / 40
197 On Training Set
198 t = 100, loss = 0.2946
199 t = 200, loss = 0.4491
200 t = 300, loss = 0.3180
201 Got 40004 / 45000 correct (88.90%)
202 On Validation Set Got 4094 / 5000 correct (81.88%)
203 Starting epoch 29 / 40
204 On Training Set
205 t = 100, loss = 0.2115
206 t = 200, loss = 0.3507
207 t = 300, loss = 0.3780
208 Got 40176 / 45000 correct (89.28%)
209 On Validation Set Got 4149 / 5000 correct (82.98%)
210 Starting epoch 30 / 40
211 On Training Set
212 t = 100, loss = 0.1804
213 t = 200, loss = 0.3790
214 t = 300, loss = 0.3140
215 Got 40114 / 45000 correct (89.14%)
216 On Validation Set Got 3964 / 5000 correct (79.28%)
217 Starting epoch 31 / 40
218 On Training Set
219 t = 100, loss = 0.2728
220 t = 200, loss = 0.3458
221 t = 300, loss = 0.2438
222 Got 40425 / 45000 correct (89.83%)
223 On Validation Set Got 4111 / 5000 correct (82.22%)
224 Starting epoch 32 / 40
225 On Training Set
226 t = 100, loss = 0.2826
227 t = 200, loss = 0.3948
228 t = 300, loss = 0.2424
229 Got 40366 / 45000 correct (89.70%)
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230 On Validation Set Got 4113 / 5000 correct (82.26%)
231 Starting epoch 33 / 40
232 On Training Set
233 t = 100, loss = 0.2363
234 t = 200, loss = 0.4151
235 t = 300, loss = 0.2556
236 Got 40486 / 45000 correct (89.97%)
237 On Validation Set Got 4210 / 5000 correct (84.20%)
238 Starting epoch 34 / 40
239 On Training Set
240 t = 100, loss = 0.1999
241 t = 200, loss = 0.4223
242 t = 300, loss = 0.2502
243 Got 40478 / 45000 correct (89.95%)
244 On Validation Set Got 4107 / 5000 correct (82.14%)
245 Starting epoch 35 / 40
246 On Training Set
247 t = 100, loss = 0.2700
248 t = 200, loss = 0.3098
249 t = 300, loss = 0.3395
250 Got 40742 / 45000 correct (90.54%)
251 On Validation Set Got 4197 / 5000 correct (83.94%)
252 Starting epoch 36 / 40
253 On Training Set
254 t = 100, loss = 0.2803
255 t = 200, loss = 0.3503
256 t = 300, loss = 0.3074
257 Got 40618 / 45000 correct (90.26%)
258 On Validation Set Got 4192 / 5000 correct (83.84%)
259 Starting epoch 37 / 40
260 On Training Set
261 t = 100, loss = 0.2286
262 t = 200, loss = 0.3315
263 t = 300, loss = 0.2238
264 Got 40770 / 45000 correct (90.60%)
265 On Validation Set Got 4203 / 5000 correct (84.06%)
266 Starting epoch 38 / 40
267 On Training Set
268 t = 100, loss = 0.2148
269 t = 200, loss = 0.4048
270 t = 300, loss = 0.2564
271 Got 40785 / 45000 correct (90.63%)
272 On Validation Set Got 4135 / 5000 correct (82.70%)
273 Starting epoch 39 / 40
274 On Training Set
275 t = 100, loss = 0.2714
276 t = 200, loss = 0.2611
277 t = 300, loss = 0.2847
278 Got 40704 / 45000 correct (90.45%)
279 On Validation Set Got 4223 / 5000 correct (84.46%)
280 Starting epoch 40 / 40
281 On Training Set
282 t = 100, loss = 0.3237
283 t = 200, loss = 0.2945
284 t = 300, loss = 0.3130
285 Got 40923 / 45000 correct (90.94%)
286 On Validation Set Got 4216 / 5000 correct (84.32%)
287 Training for 5 epochs with learning rate 0.010000
288 Starting epoch 1 / 5
289 On Training Set
290 t = 100, loss = 0.2150
291 t = 200, loss = 0.2091
292 t = 300, loss = 0.1631
293 Got 42381 / 45000 correct (94.18%)
294 On Validation Set Got 4488 / 5000 correct (89.76%)
295 Starting epoch 2 / 5
296 On Training Set
297 t = 100, loss = 0.2102
298 t = 200, loss = 0.2258
299 t = 300, loss = 0.1512
300 Got 42944 / 45000 correct (95.43%)
301 On Validation Set Got 4488 / 5000 correct (89.76%)
302 Starting epoch 3 / 5
303 On Training Set
304 t = 100, loss = 0.1373
305 t = 200, loss = 0.1651
306 t = 300, loss = 0.1003
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307 Got 43121 / 45000 correct (95.82%)
308 On Validation Set Got 4481 / 5000 correct (89.62%)
309 Starting epoch 4 / 5
310 On Training Set
311 t = 100, loss = 0.1153
312 t = 200, loss = 0.1915
313 t = 300, loss = 0.0885
314 Got 43300 / 45000 correct (96.22%)
315 On Validation Set Got 4515 / 5000 correct (90.30%)
316 Starting epoch 5 / 5
317 On Training Set
318 t = 100, loss = 0.0950
319 t = 200, loss = 0.1305
320 t = 300, loss = 0.0870
321 Got 43425 / 45000 correct (96.50%)
322 On Validation Set Got 4496 / 5000 correct (89.92%)
323 Training for 5 epochs with learning rate 0.001000
324 Starting epoch 1 / 5
325 On Training Set
326 t = 100, loss = 0.1034
327 t = 200, loss = 0.1336
328 t = 300, loss = 0.0731
329 Got 43575 / 45000 correct (96.83%)
330 On Validation Set Got 4522 / 5000 correct (90.44%)
331 Starting epoch 2 / 5
332 On Training Set
333 t = 100, loss = 0.1547
334 t = 200, loss = 0.1624
335 t = 300, loss = 0.0671
336 Got 43615 / 45000 correct (96.92%)
337 On Validation Set Got 4512 / 5000 correct (90.24%)
338 Starting epoch 3 / 5
339 On Training Set
340 t = 100, loss = 0.0639
341 t = 200, loss = 0.0968
342 t = 300, loss = 0.0821
343 Got 43685 / 45000 correct (97.08%)
344 On Validation Set Got 4526 / 5000 correct (90.52%)
345 Starting epoch 4 / 5
346 On Training Set
347 t = 100, loss = 0.0833
348 t = 200, loss = 0.0727
349 t = 300, loss = 0.0691
350 Got 43713 / 45000 correct (97.14%)
351 On Validation Set Got 4536 / 5000 correct (90.72%)
352 Starting epoch 5 / 5
353 On Training Set
354 t = 100, loss = 0.1033
355 t = 200, loss = 0.1750
356 t = 300, loss = 0.1255
357 Got 43701 / 45000 correct (97.11%)
358 On Validation Set Got 4500 / 5000 correct (90.00%)
359 Best Performance On Valid Set at Epoch 49 with Accuracy 90.72%
360 Final test accuracy:
361 Got 8966 / 10000 correct (89.66%)
362
363 Process finished with exit code 0
364
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