

```
1 ssh://sangsq@10.50.221.195:22/home/sangsq/anaconda3/bin/
2 python -u /home/sangsq/.pycharm_helpers/pydev/pydevconsole.py --mode=server
3
4 import sys; print('Python %s on %s' % (sys.version, sys.
5 platform))
6 sys.path.extend(['/home/sangsq/flower/PSEP', '/home/sangsq/
7 flower/PSEP'])
8
9 Python 3.7.3 (default, Mar 27 2019, 22:11:17)
10 Type 'copyright', 'credits' or 'license' for more
11 information
12 IPython 7.4.0 -- An enhanced Interactive Python. Type '?' for help.
13 PyDev console: using IPython 7.4.0
14
15 Python 3.7.3 (default, Mar 27 2019, 22:11:17)
16 [GCC 7.3.0] on linux
17 In[2]: runfile('/home/sangsq/flower/PSEP/model/fm-psep.py',
18 ' , wdir='/home/sangsq/flower/PSEP/model')
19 loading data
20 remove 0 isolated drugs: []
21 remove finished
22 963 polypharmacy side effects
23 data has been loaded
24 cuda
25 model training ...
26
27 0 auprc: 0.49787541543291214 auroc: 0.5005036986638736
28 ap: 0.4978756292080168
29
30 0 auprc: 0.49861792258810983 auroc: 0.5011309886328865
31 ap: 0.49861990838114956 time: 84.73237085342407
32
33 1 auprc: 0.49991973222037217 auroc: 0.5007205551535276
34 ap: 0.49991996571447284
35
36 1 auprc: 0.5006875430315981 auroc: 0.5014541738638685
37 ap: 0.500689564036861 time: 80.27950477600098
38
39 2 auprc: 0.5025585214983995 auroc: 0.500500155651253
40 ap: 0.5025593670278319
41
42 2 auprc: 0.503308032055055 auroc: 0.5013440152372022
43 ap: 0.5033117315069485 time: 80.20192170143127
44
45 3 auprc: 0.5053731663989176 auroc: 0.5007788100777861
46 ap: 0.5053744781582264
47
48 3 auprc: 0.5060087634280576 auroc: 0.5015757254141945
49 ap: 0.5060098603295524 time: 79.11982703208923
50
51 4 auprc: 0.5071300421827962 auroc: 0.5007544050455479
52 ap: 0.5071247095895797
53
54 4 auprc: 0.5080152718100562 auroc: 0.5018331517281978
55 ap: 0.5080084925794536 time: 79.4258143901825
```

```
35
36 5    auprc: 0.5087903459857175      auroc: 0.5014650714029466
      ap: 0.5088165718882024
37 5    auprc: 0.5098252777484594      auroc: 0.5025431847628762
      ap: 0.5098372894248262      time: 77.10631990432739
38
39 6    auprc: 0.508722436880788      auroc: 0.5021006043206891
      ap: 0.5087041006349122
40 6    auprc: 0.5099325387089718      auroc: 0.503236522511484
      ap: 0.5098408891049483      time: 75.85550284385681
41
42 7    auprc: 0.5050390420205025      auroc: 0.5024889440545492
      ap: 0.5047935721907626
43 7    auprc: 0.5059738038419905      auroc: 0.503148304963922
      ap: 0.5057736671973441      time: 74.80413222312927
44
45 8    auprc: 0.500698348516703      auroc: 0.5020579086754219
      ap: 0.5007822038427577
46 8    auprc: 0.5012231502203925      auroc: 0.5022320577805031
      ap: 0.5012300850090665      time: 74.21034789085388
47
48 9    auprc: 0.4975491225396011      auroc: 0.5014991272648903
      ap: 0.49834509805194505
49 9    auprc: 0.49809061598721294      auroc: 0.5018642294632737
      ap: 0.49914775006935475      time: 72.71218347549438
50
51 10   auprc: 0.4952092278651755      auroc: 0.5012822847934624
      ap: 0.4957574872592791
52 10   auprc: 0.4946951376149927      auroc: 0.5014721580030882
      ap: 0.49715062789442444      time: 72.2868447303772
53
54 11   auprc: 0.49037365320888027      auroc: 0.
      5009744367821064      ap: 0.49933971293986845
55 11   auprc: 0.49063370655703364      auroc: 0.
      5005766180071128      ap: 0.4993699056220175      time: 71.
      53315258026123
56
57 12   auprc: 0.49530122452391867      auroc: 0.
      5004256044422406      ap: 0.49966629137969537
58 12   auprc: 0.4950905023855531      auroc: 0.
      49959582020295834      ap: 0.499546441499501      time: 70.
      67792534828186
59
60 13   auprc: 0.4960816302999373      auroc: 0.5000636172991562
      ap: 0.4990946342560366
61 13   auprc: 0.4944394411273642      auroc: 0.4997617292761963
      ap: 0.4998646612457225      time: 71.03022527694702
62
63 14   auprc: 0.49640648405893406      auroc: 0.
      5001661314252215      ap: 0.4991051870095796
64 14   auprc: 0.4946471571523435      auroc: 0.
```

64	49974743640906016	ap: 0.4999632953850647	time: 70.
	49661564826965		
65			
66	15 auprc: 0.4934780974202013	auroc: 0.	
	5001838010668146	ap: 0.500879186584886	
67	15 auprc: 0.49689402094662755	auroc: 0.	
	49968080239556933	ap: 0.49988391043298175	time: 70.
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68			
69	16 auprc: 0.5008036639734783	auroc: 0.	
	5002707083161567	ap: 0.49935961678445767	
70	16 auprc: 0.5003564185658302	auroc: 0.	
	49971493265931266	ap: 0.49906848826075706	time: 69.
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71			
72	17 auprc: 0.5040312260509225	auroc: 0.	
	5002753832445154	ap: 0.4987391321093421	
73	17 auprc: 0.5012216829588272	auroc: 0.	
	4995922477850418	ap: 0.498777357047304	time: 69.
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74			
75	18 auprc: 0.5096857759242264	auroc: 0.	
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76	18 auprc: 0.5004225202920094	auroc: 0.	
	5001125647696671	ap: 0.4981302033072356	time: 69.
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77			
78	19 auprc: 0.47757562823049604	auroc: 0.	
	5004616545581951	ap: 0.49910590546828126	
79	19 auprc: 0.47602292065460955	auroc: 0.	
	5002471444594813	ap: 0.4989814927829728	time: 68.
	74831509590149		
80			
81	20 auprc: 0.4909039845309121	auroc: 0.	
	4999980964325824	ap: 0.49795985606313126	
82	20 auprc: 0.48212013618667215	auroc: 0.	
	5000110360732685	ap: 0.49845447558551637	time: 69.
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83			
84	21 auprc: 0.4927282285937893	auroc: 0.	
	4999583986466111	ap: 0.4985153029670453	
85	21 auprc: 0.4969734675024101	auroc: 0.	
	4998260489026691	ap: 0.49831052540982734	time: 68.
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86			
87	22 auprc: 0.508689706931016	auroc: 0.4999661804258849	
	ap: 0.49850651955627084		
88	22 auprc: 0.5061206937896053	auroc: 0.	
	49966574802102814	ap: 0.4983330577421585	time: 69.
	03798532485962		
89			

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90 23 auprc: 0.49647313187049724 auroc: 0.  
500064672362683 ap: 0.49941134400728016  
91 23 auprc: 0.49973157021752945 auroc: 0.  
49962567268608893 ap: 0.4988702494080931 time: 68.  
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92  
93 24 auprc: 0.5053300904632878 auroc: 0.  
49996895671006003 ap: 0.4987277643961865  
94 24 auprc: 0.5030384001556949 auroc: 0.  
49956529059314186 ap: 0.49843933747509483 time: 68.  
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95  
96 25 auprc: 0.501492605435882 auroc: 0.4999234020434359  
ap: 0.49856241328665657  
97 25 auprc: 0.5027250499478952 auroc: 0.  
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98  
99 26 auprc: 0.4991344465373714 auroc: 0.50011272988622  
ap: 0.49857050231837385  
100 26 auprc: 0.4958755165376419 auroc: 0.  
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102 27 auprc: 0.4981135694305531 auroc: 0.  
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103 27 auprc: 0.4924650321608214 auroc: 0.  
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104  
105 28 auprc: 0.49118802842274245 auroc: 0.  
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106 28 auprc: 0.48385838456691216 auroc: 0.  
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107  
108 29 auprc: 0.45663378387641257 auroc: 0.  
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109 29 auprc: 0.45286332788152717 auroc: 0.  
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110  
111 30 auprc: 0.45580045479315595 auroc: 0.  
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112 30 auprc: 0.45217772660305244 auroc: 0.  
5002067412376524 ap: 0.4995992568773133 time: 68.  
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113  
114 31 auprc: 0.45608271562179203 auroc: 0.  
5006375327626407 ap: 0.4996608373389832  
115 31 auprc: 0.4520777111493787 auroc: 0.
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115	5002081459322671	ap: 0.49949910690538524	time: 68.
	64060926437378		
116			
117	32 auprc: 0.45142552717790024	auroc: 0.	
	500655537498134	ap: 0.49972798071270236	
118	32 auprc: 0.4471728273492171	auroc: 0.	
	5002391980557994	ap: 0.49959229133984695	time: 68.
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119			
120	33 auprc: 0.4511032189784136	auroc: 0.	
	5006307556320664	ap: 0.499603081118756	
121	33 auprc: 0.4473994024514656	auroc: 0.	
	5002283224118546	ap: 0.49943931259020813	time: 68.
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122			
123	34 auprc: 0.4520597890981874	auroc: 0.	
	5006500139023091	ap: 0.499432167492864	
124	34 auprc: 0.4472676605386879	auroc: 0.50023050436784	
	ap: 0.4993074044042902	time: 69.55910420417786	
125			
126	35 auprc: 0.45161053509220284	auroc: 0.	
	5006221903569023	ap: 0.499283637225774	
127	35 auprc: 0.4474059740178747	auroc: 0.	
	5002961553711054	ap: 0.49919439962459516	time: 68.
	63820219039917		
128			
129	36 auprc: 0.4515435274063161	auroc: 0.	
	5006859235365441	ap: 0.4992025161907382	
130	36 auprc: 0.4472001426508359	auroc: 0.	
	5003060916292636	ap: 0.4990902227807496	time: 68.
	17155575752258		
131			
132	37 auprc: 0.44814849212631985	auroc: 0.	
	5006735201597464	ap: 0.49920427561354613	
133	37 auprc: 0.443651740685583	auroc: 0.5002640765567647	
	ap: 0.49909766337486183	time: 69.1126811504364	
134			
135	38 auprc: 0.42927881467069345	auroc: 0.	
	5007861776419638	ap: 0.49986224462006335	
136	38 auprc: 0.4242371976286711	auroc: 0.	
	5003972879988392	ap: 0.49978718992562887	time: 68.
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137			
138	39 auprc: 0.4290244706852171	auroc: 0.	
	5007724901826802	ap: 0.49980980389103646	
139	39 auprc: 0.42418540084039524	auroc: 0.	
	5004415590039499	ap: 0.4997605724851488	time: 68.
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140			
141	40 auprc: 0.428888026535963	auroc: 0.500881378953969	
	ap: 0.49982569743471394		

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142 40 auprc: 0.4238647221408648 auroc: 0.  
5004630351726146 ap: 0.4997468056093745 time: 69.  
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143  
144 41 auprc: 0.3975742787541334 auroc: 0.  
5009783705176387 ap: 0.500877289380718  
145 41 auprc: 0.3931426059872202 auroc: 0.  
5006327907377471 ap: 0.5008296575446607 time: 69.  
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147 42 auprc: 0.36611408550459196 auroc: 0.  
5010946845797895 ap: 0.5018617581004785  
148 42 auprc: 0.3623746165892054 auroc: 0.  
5008280428131395 ap: 0.5018444270880291 time: 68.  
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149  
150 43 auprc: 0.4047889232068382 auroc: 0.  
5009529320041876 ap: 0.5006013500205864  
151 43 auprc: 0.3623676221925193 auroc: 0.500828352437469  
ap: 0.5018373997616131 time: 69.0464096069336  
152  
153 44 auprc: 0.4056705395556203 auroc: 0.  
5009458421080867 ap: 0.5006001406171098  
154 44 auprc: 0.40180489633816957 auroc: 0.  
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156 45 auprc: 0.42889062898756486 auroc: 0.  
5009183433687968 ap: 0.49979314439508277  
157 45 auprc: 0.4243934764796703 auroc: 0.  
5005462132075805 ap: 0.49973133562774674 time: 69.  
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158  
159 46 auprc: 0.4280468168252521 auroc: 0.  
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160 46 auprc: 0.42459420396849074 auroc: 0.  
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162 47 auprc: 0.42844230963659957 auroc: 0.  
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163 47 auprc: 0.4247383197750847 auroc: 0.  
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165 48 auprc: 0.429011326783968 auroc: 0.5010206908783069  
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166 48 auprc: 0.4249503082481325 auroc: 0.  
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167
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168 49 auprc: 0.42880098224694985 auroc: 0.  
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169 49 auprc: 0.4249556573077053 auroc: 0.  
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171 50 auprc: 0.4307885475928887 auroc: 0.  
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174 51 auprc: 0.42027734507070375 auroc: 0.  
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178 52 auprc: 0.4188635497087242 auroc: 0.  
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180 53 auprc: 0.4219779596323325 auroc: 0.  
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181 53 auprc: 0.41882157449591445 auroc: 0.  
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182  
183 54 auprc: 0.43970820158036594 auroc: 0.  
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184 54 auprc: 0.4362488972715357 auroc: 0.  
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185  
186 55 auprc: 0.43912126934123824 auroc: 0.50134111779375  
      ap: 0.4995712402330939  
187 55 auprc: 0.4355331782194126 auroc: 0.  
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188  
189 56 auprc: 0.4370029470514459 auroc: 0.  
      5013749165711114 ap: 0.49965235424920484  
190 56 auprc: 0.4338641984376404 auroc: 0.  
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191  
192 57 auprc: 0.4195184031251019 auroc: 0.  
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193 57 auprc: 0.4338342799594928 auroc: 0.
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193 5011045580162342      ap: 0.4995815118243684      time: 68.  
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194  
195 58    auprc: 0.4204189903009783    auroc: 0.  
        5015870830890704    ap: 0.5004024039667638  
196 58    auprc: 0.4171721923001394    auroc: 0.  
        5013751286570186    ap: 0.500400240851655      time: 69.  
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197  
198 59    auprc: 0.42819620193832864    auroc: 0.  
        5015367776108846    ap: 0.5000510660534383  
199 59    auprc: 0.4258076294294892    auroc: 0.  
        5013119539459836    ap: 0.5000151079623759      time: 69.  
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201 60    auprc: 0.4419201727453749    auroc: 0.  
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202 60    auprc: 0.43918229733813785    auroc: 0.  
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204 61    auprc: 0.44329161435526465    auroc: 0.  
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205 61    auprc: 0.44041711377357584    auroc: 0.  
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206  
207 62    auprc: 0.44378910155925433    auroc: 0.  
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208 62    auprc: 0.4419314237572588    auroc: 0.  
        5015021388963342    ap: 0.49930858842610615      time: 69.  
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209  
210 63    auprc: 0.43864772112324885    auroc: 0.  
        5020370882369393    ap: 0.4997133975624663  
211 63    auprc: 0.43617519980188196    auroc: 0.  
        5017506694952011    ap: 0.4996687764418403      time: 68.  
        7658417224884  
212  
213  
214 Process finished with exit code 0  
215
```