

```
1 ssh://sangsq@10.50.221.195:22/home/sangsq/anaconda3/bin/
  python -u /home/sangsq/flower/PSEP/model/hhh.py
2 loading data
3 remove 0 isolated drugs: []
4 remove finished
5 963 polypharmacy side effects
6 data has been loaded
7 cuda
8 model training ...
9   0    loss:1.3908    auprc:0.4971    auroc:0.4996    ap@50:0.
  4977
10   0    loss:1.3908    auprc:0.4992    auroc:0.5008    ap@50:0.
  5031    time:81.0
11
12   1    loss:1.3879    auprc:0.4988    auroc:0.5016    ap@50:0.
  4994
13   1    loss:1.3879    auprc:0.5008    auroc:0.5030    ap@50:0.
  5047    time:81.5
14
15   2    loss:1.3868    auprc:0.5008    auroc:0.5039    ap@50:0.
  5014
16   2    loss:1.3868    auprc:0.5026    auroc:0.5051    ap@50:0.
  5065    time:80.7
17
18   3    loss:1.3862    auprc:0.5037    auroc:0.5072    ap@50:0.
  5043
19   3    loss:1.3862    auprc:0.5049    auroc:0.5081    ap@50:0.
  5089    time:80.6
20
21   4    loss:1.3858    auprc:0.5081    auroc:0.5123    ap@50:0.
  5087
22   4    loss:1.3858    auprc:0.5099    auroc:0.5138    ap@50:0.
  5138    time:80.1
23
24   5    loss:1.3851    auprc:0.5167    auroc:0.5215    ap@50:0.
  5172
25   5    loss:1.3851    auprc:0.5201    auroc:0.5249    ap@50:0.
  5238    time:79.7
26
27   6    loss:1.3839    auprc:0.5328    auroc:0.5381    ap@50:0.
  5333
28   6    loss:1.3839    auprc:0.5376    auroc:0.5431    ap@50:0.
  5412    time:80.2
29
30   7    loss:1.3816    auprc:0.5552    auroc:0.5609    ap@50:0.
  5557
31   7    loss:1.3816    auprc:0.5621    auroc:0.5682    ap@50:0.
  5654    time:81.0
32
33   8    loss:1.3776    auprc:0.5811    auroc:0.5872    ap@50:0.
  5815
```

34	8	loss:1.3776 5934 time:80.0	auprc:0.5903	auroc:0.5971	ap@50:0.
35					
36	9	loss:1.3708 6095	auprc:0.6091	auroc:0.6156	ap@50:0.
37	9	loss:1.3708 6226 time:81.3	auprc:0.6198	auroc:0.6274	ap@50:0.
38					
39	10	loss:1.3597 6382	auprc:0.6378	auroc:0.6447	ap@50:0.
40	10	loss:1.3597 6523 time:80.4	auprc:0.6498	auroc:0.6581	ap@50:0.
41					
42	11	loss:1.3423 6678	auprc:0.6675	auroc:0.6750	ap@50:0.
43	11	loss:1.3423 6824 time:80.0	auprc:0.6802	auroc:0.6892	ap@50:0.
44					
45	12	loss:1.3163 6975	auprc:0.6972	auroc:0.7058	ap@50:0.
46	12	loss:1.3163 7125 time:80.4	auprc:0.7105	auroc:0.7206	ap@50:0.
47					
48	13	loss:1.2802 7269	auprc:0.7266	auroc:0.7368	ap@50:0.
49	13	loss:1.2802 7413 time:79.9	auprc:0.7395	auroc:0.7511	ap@50:0.
50					
51	14	loss:1.2341 7534	auprc:0.7531	auroc:0.7660	ap@50:0.
52	14	loss:1.2341 7678 time:81.7	auprc:0.7662	auroc:0.7799	ap@50:0.
53					
54	15	loss:1.1775 7777	auprc:0.7774	auroc:0.7938	ap@50:0.
55	15	loss:1.1775 7911 time:80.9	auprc:0.7896	auroc:0.8066	ap@50:0.
56					
57	16	loss:1.1150 7983	auprc:0.7981	auroc:0.8184	ap@50:0.
58	16	loss:1.1150 8111 time:80.7	auprc:0.8096	auroc:0.8303	ap@50:0.
59					
60	17	loss:1.0486 8165	auprc:0.8163	auroc:0.8397	ap@50:0.
61	17	loss:1.0486 8296 time:80.2	auprc:0.8282	auroc:0.8514	ap@50:0.
62					
63	18	loss:0.9851 8347	auprc:0.8344	auroc:0.8594	ap@50:0.
64	18	loss:0.9851 8347	auprc:0.8468	auroc:0.8707	ap@50:0.

64	8482	time:80.7		
65				
66	19	loss:0.9272	auprc:0.8516	auroc:0.8767 ap@50:0.
	8518			
67	19	loss:0.9272	auprc:0.8632	auroc:0.8863 ap@50:0.
	8644	time:79.4		
68				
69	20	loss:0.8771	auprc:0.8665	auroc:0.8906 ap@50:0.
	8666			
70	20	loss:0.8771	auprc:0.8777	auroc:0.8993 ap@50:0.
	8789	time:79.8		
71				
72	21	loss:0.8324	auprc:0.8821	auroc:0.9039 ap@50:0.
	8823			
73	21	loss:0.8324	auprc:0.8926	auroc:0.9117 ap@50:0.
	8936	time:79.8		
74				
75	22	loss:0.7934	auprc:0.8967	auroc:0.9158 ap@50:0.
	8969			
76	22	loss:0.7934	auprc:0.9056	auroc:0.9219 ap@50:0.
	9064	time:80.7		
77				
78	23	loss:0.7582	auprc:0.9079	auroc:0.9250 ap@50:0.
	9080			
79	23	loss:0.7582	auprc:0.9155	auroc:0.9299 ap@50:0.
	9162	time:80.2		
80				
81	24	loss:0.7288	auprc:0.9169	auroc:0.9323 ap@50:0.
	9170			
82	24	loss:0.7288	auprc:0.9232	auroc:0.9362 ap@50:0.
	9238	time:79.8		
83				
84	25	loss:0.7035	auprc:0.9243	auroc:0.9383 ap@50:0.
	9243			
85	25	loss:0.7035	auprc:0.9291	auroc:0.9411 ap@50:0.
	9297	time:79.7		
86				
87	26	loss:0.6840	auprc:0.9291	auroc:0.9422 ap@50:0.
	9292			
88	26	loss:0.6840	auprc:0.9331	auroc:0.9444 ap@50:0.
	9335	time:79.8		
89				
90	27	loss:0.6695	auprc:0.9322	auroc:0.9450 ap@50:0.
	9323			
91	27	loss:0.6695	auprc:0.9355	auroc:0.9467 ap@50:0.
	9359	time:79.3		
92				
93	28	loss:0.6578	auprc:0.9345	auroc:0.9468 ap@50:0.
	9345			
94	28	loss:0.6578	auprc:0.9372	auroc:0.9482 ap@50:0.
	9376	time:79.8		

95					
96	29	loss:0.6500	auprc:0.9357	auroc:0.9480	ap@50:0.
	9358				
97	29	loss:0.6500	auprc:0.9381	auroc:0.9491	ap@50:0.
	9385	time:80.2			
98					
99	30	loss:0.6436	auprc:0.9367	auroc:0.9489	ap@50:0.
	9368				
100	30	loss:0.6436	auprc:0.9387	auroc:0.9497	ap@50:0.
	9391	time:80.2			
101					
102	31	loss:0.6377	auprc:0.9373	auroc:0.9495	ap@50:0.
	9374				
103	31	loss:0.6377	auprc:0.9394	auroc:0.9504	ap@50:0.
	9398	time:79.7			
104					
105	32	loss:0.6322	auprc:0.9383	auroc:0.9503	ap@50:0.
	9383				
106	32	loss:0.6322	auprc:0.9401	auroc:0.9510	ap@50:0.
	9405	time:80.7			
107					
108	33	loss:0.6265	auprc:0.9390	auroc:0.9510	ap@50:0.
	9391				
109	33	loss:0.6265	auprc:0.9408	auroc:0.9516	ap@50:0.
	9412	time:79.3			
110					
111	34	loss:0.6215	auprc:0.9397	auroc:0.9516	ap@50:0.
	9397				
112	34	loss:0.6215	auprc:0.9415	auroc:0.9523	ap@50:0.
	9419	time:79.7			
113					
114	35	loss:0.6167	auprc:0.9404	auroc:0.9522	ap@50:0.
	9404				
115	35	loss:0.6167	auprc:0.9421	auroc:0.9528	ap@50:0.
	9424	time:79.8			
116					
117	36	loss:0.6129	auprc:0.9408	auroc:0.9526	ap@50:0.
	9409				
118	36	loss:0.6129	auprc:0.9425	auroc:0.9532	ap@50:0.
	9428	time:79.8			
119					
120	37	loss:0.6087	auprc:0.9411	auroc:0.9530	ap@50:0.
	9411				
121	37	loss:0.6087	auprc:0.9428	auroc:0.9536	ap@50:0.
	9432	time:79.8			
122					
123	38	loss:0.6054	auprc:0.9416	auroc:0.9533	ap@50:0.
	9416				
124	38	loss:0.6054	auprc:0.9431	auroc:0.9539	ap@50:0.
	9435	time:79.7			
125					

126	39	loss:0.6026 9418	auprc:0.9418	auroc:0.9536	ap@50:0.
127	39	loss:0.6026 9437	auprc:0.9433 time:79.3	auroc:0.9541	ap@50:0.
128					
129	40	loss:0.6004 9420	auprc:0.9420	auroc:0.9538	ap@50:0.
130	40	loss:0.6004 9439	auprc:0.9435 time:79.8	auroc:0.9544	ap@50:0.
131					
132	41	loss:0.5977 9423	auprc:0.9423	auroc:0.9541	ap@50:0.
133	41	loss:0.5977 9441	auprc:0.9437 time:79.8	auroc:0.9546	ap@50:0.
134					
135	42	loss:0.5961 9421	auprc:0.9420	auroc:0.9541	ap@50:0.
136	42	loss:0.5961 9442	auprc:0.9438 time:79.3	auroc:0.9548	ap@50:0.
137					
138	43	loss:0.5935 9422	auprc:0.9422	auroc:0.9543	ap@50:0.
139	43	loss:0.5935 9443	auprc:0.9439 time:79.3	auroc:0.9549	ap@50:0.
140					
141	44	loss:0.5919 9425	auprc:0.9425	auroc:0.9545	ap@50:0.
142	44	loss:0.5919 9444	auprc:0.9440 time:79.3	auroc:0.9551	ap@50:0.
143					
144	45	loss:0.5909 9424	auprc:0.9423	auroc:0.9545	ap@50:0.
145	45	loss:0.5909 9445	auprc:0.9441 time:80.2	auroc:0.9552	ap@50:0.
146					
147	46	loss:0.5892 9422	auprc:0.9422	auroc:0.9546	ap@50:0.
148	46	loss:0.5892 9445	auprc:0.9442 time:80.8	auroc:0.9553	ap@50:0.
149					
150	47	loss:0.5877 9426	auprc:0.9426	auroc:0.9549	ap@50:0.
151	47	loss:0.5877 9446	auprc:0.9443 time:79.3	auroc:0.9555	ap@50:0.
152					
153	48	loss:0.5865 9425	auprc:0.9425	auroc:0.9549	ap@50:0.
154	48	loss:0.5865 9447	auprc:0.9444 time:79.7	auroc:0.9556	ap@50:0.
155					
156	49	loss:0.5851	auprc:0.9430	auroc:0.9552	ap@50:0.

156	9430				
157	49	loss:0.5851	auprc:0.9445	auroc:0.9557	ap@50:0.
	9448	time:79.7			
158					
159	50	loss:0.5848	auprc:0.9426	auroc:0.9551	ap@50:0.
	9426				
160	50	loss:0.5848	auprc:0.9446	auroc:0.9558	ap@50:0.
	9449	time:79.8			
161					
162	51	loss:0.5835	auprc:0.9429	auroc:0.9553	ap@50:0.
	9430				
163	51	loss:0.5835	auprc:0.9446	auroc:0.9559	ap@50:0.
	9450	time:79.8			
164					
165	52	loss:0.5830	auprc:0.9430	auroc:0.9553	ap@50:0.
	9430				
166	52	loss:0.5830	auprc:0.9447	auroc:0.9560	ap@50:0.
	9451	time:79.3			
167					
168	53	loss:0.5817	auprc:0.9432	auroc:0.9555	ap@50:0.
	9433				
169	53	loss:0.5817	auprc:0.9448	auroc:0.9561	ap@50:0.
	9452	time:79.3			
170					
171	54	loss:0.5808	auprc:0.9433	auroc:0.9556	ap@50:0.
	9434				
172	54	loss:0.5808	auprc:0.9448	auroc:0.9562	ap@50:0.
	9452	time:79.3			
173					
174	55	loss:0.5802	auprc:0.9434	auroc:0.9556	ap@50:0.
	9434				
175	55	loss:0.5802	auprc:0.9449	auroc:0.9563	ap@50:0.
	9453	time:79.3			
176					
177	56	loss:0.5797	auprc:0.9433	auroc:0.9556	ap@50:0.
	9434				
178	56	loss:0.5797	auprc:0.9450	auroc:0.9563	ap@50:0.
	9453	time:80.2			
179					
180	57	loss:0.5790	auprc:0.9433	auroc:0.9557	ap@50:0.
	9433				
181	57	loss:0.5790	auprc:0.9450	auroc:0.9564	ap@50:0.
	9454	time:80.2			
182					
183	58	loss:0.5785	auprc:0.9436	auroc:0.9559	ap@50:0.
	9437				
184	58	loss:0.5785	auprc:0.9451	auroc:0.9564	ap@50:0.
	9455	time:79.6			
185					
186	59	loss:0.5783	auprc:0.9435	auroc:0.9558	ap@50:0.
	9436				

187	59	loss:0.5783 9455	aucroc:0.9564 time:81.9	auprc:0.9451	ap@50:0.
188					
189	60	loss:0.5772 9438	aucroc:0.9559 time:79.8	auprc:0.9437	ap@50:0.
190	60	loss:0.5772 9455	aucroc:0.9565 time:79.8	auprc:0.9452	ap@50:0.
191					
192	61	loss:0.5769 9437	aucroc:0.9559 time:79.7	auprc:0.9437	ap@50:0.
193	61	loss:0.5769 9456	aucroc:0.9565 time:79.7	auprc:0.9452	ap@50:0.
194					
195	62	loss:0.5770 9435	aucroc:0.9558 time:80.2	auprc:0.9435	ap@50:0.
196	62	loss:0.5770 9456	aucroc:0.9566 time:80.2	auprc:0.9453	ap@50:0.
197					
198	63	loss:0.5765 9438	aucroc:0.9559 time:79.3	auprc:0.9438	ap@50:0.
199	63	loss:0.5765 9457	aucroc:0.9566 time:79.3	auprc:0.9453	ap@50:0.
200					
201	64	loss:0.5762 9437	aucroc:0.9559 time:80.1	auprc:0.9437	ap@50:0.
202	64	loss:0.5762 9457	aucroc:0.9566 time:80.1	auprc:0.9454	ap@50:0.
203					
204	65	loss:0.5755 9438	aucroc:0.9560 time:80.7	auprc:0.9437	ap@50:0.
205	65	loss:0.5755 9458	aucroc:0.9567 time:80.7	auprc:0.9455	ap@50:0.
206					
207	66	loss:0.5755 9440	aucroc:0.9561 time:80.6	auprc:0.9439	ap@50:0.
208	66	loss:0.5755 9458	aucroc:0.9567 time:80.6	auprc:0.9455	ap@50:0.
209					
210	67	loss:0.5747 9440	aucroc:0.9561 time:80.6	auprc:0.9439	ap@50:0.
211	67	loss:0.5747 9459	aucroc:0.9568 time:80.6	auprc:0.9456	ap@50:0.
212					
213	68	loss:0.5741 9441	aucroc:0.9562 time:79.3	auprc:0.9440	ap@50:0.
214	68	loss:0.5741 9459	aucroc:0.9568 time:79.3	auprc:0.9455	ap@50:0.
215					
216	69	loss:0.5743 9441	aucroc:0.9562 time:79.3	auprc:0.9440	ap@50:0.
217	69	loss:0.5743	aucroc:0.9569 time:79.3	auprc:0.9457	ap@50:0.

217	9461	time:79.7			
218					
219	70	loss:0.5744	auprc:0.9440	auroc:0.9562	ap@50:0.
	9440				
220	70	loss:0.5744	auprc:0.9456	auroc:0.9568	ap@50:0.
	9459	time:81.1			
221					
222	71	loss:0.5750	auprc:0.9443	auroc:0.9564	ap@50:0.
	9444				
223	71	loss:0.5750	auprc:0.9459	auroc:0.9571	ap@50:0.
	9463	time:79.7			
224					
225	72	loss:0.5747	auprc:0.9442	auroc:0.9564	ap@50:0.
	9442				
226	72	loss:0.5747	auprc:0.9456	auroc:0.9569	ap@50:0.
	9460	time:80.2			
227					
228	73	loss:0.5734	auprc:0.9443	auroc:0.9564	ap@50:0.
	9444				
229	73	loss:0.5734	auprc:0.9460	auroc:0.9571	ap@50:0.
	9463	time:80.2			
230					
231	74	loss:0.5725	auprc:0.9440	auroc:0.9564	ap@50:0.
	9441				
232	74	loss:0.5725	auprc:0.9459	auroc:0.9571	ap@50:0.
	9462	time:80.2			
233					
234	75	loss:0.5722	auprc:0.9444	auroc:0.9565	ap@50:0.
	9444				
235	75	loss:0.5722	auprc:0.9458	auroc:0.9571	ap@50:0.
	9462	time:80.2			
236					
237	76	loss:0.5727	auprc:0.9444	auroc:0.9566	ap@50:0.
	9445				
238	76	loss:0.5727	auprc:0.9462	auroc:0.9573	ap@50:0.
	9465	time:79.7			
239					
240	77	loss:0.5717	auprc:0.9441	auroc:0.9564	ap@50:0.
	9442				
241	77	loss:0.5717	auprc:0.9460	auroc:0.9572	ap@50:0.
	9463	time:80.2			
242					
243	78	loss:0.5707	auprc:0.9446	auroc:0.9567	ap@50:0.
	9447				
244	78	loss:0.5707	auprc:0.9461	auroc:0.9573	ap@50:0.
	9464	time:79.9			
245					
246	79	loss:0.5709	auprc:0.9446	auroc:0.9568	ap@50:0.
	9447				
247	79	loss:0.5709	auprc:0.9463	auroc:0.9574	ap@50:0.
	9466	time:79.7			

248					
249	80	loss:0.5706	auprc:0.9445	auroc:0.9567	ap@50:0.
	9446				
250	80	loss:0.5706	auprc:0.9461	auroc:0.9573	ap@50:0.
	9465	time:79.7			
251					
252	81	loss:0.5699	auprc:0.9447	auroc:0.9568	ap@50:0.
	9447				
253	81	loss:0.5699	auprc:0.9464	auroc:0.9575	ap@50:0.
	9467	time:80.1			
254					
255	82	loss:0.5692	auprc:0.9446	auroc:0.9568	ap@50:0.
	9447				
256	82	loss:0.5692	auprc:0.9464	auroc:0.9575	ap@50:0.
	9467	time:79.7			
257					
258	83	loss:0.5690	auprc:0.9447	auroc:0.9569	ap@50:0.
	9448				
259	83	loss:0.5690	auprc:0.9463	auroc:0.9575	ap@50:0.
	9466	time:79.8			
260					
261	84	loss:0.5689	auprc:0.9448	auroc:0.9569	ap@50:0.
	9448				
262	84	loss:0.5689	auprc:0.9466	auroc:0.9577	ap@50:0.
	9469	time:80.7			
263					
264	85	loss:0.5681	auprc:0.9449	auroc:0.9570	ap@50:0.
	9450				
265	85	loss:0.5681	auprc:0.9466	auroc:0.9577	ap@50:0.
	9469	time:80.7			
266					
267	86	loss:0.5673	auprc:0.9450	auroc:0.9571	ap@50:0.
	9451				
268	86	loss:0.5673	auprc:0.9466	auroc:0.9577	ap@50:0.
	9469	time:79.3			
269					
270	87	loss:0.5669	auprc:0.9453	auroc:0.9574	ap@50:0.
	9454				
271	87	loss:0.5669	auprc:0.9468	auroc:0.9579	ap@50:0.
	9472	time:79.7			
272					
273	88	loss:0.5669	auprc:0.9449	auroc:0.9571	ap@50:0.
	9449				
274	88	loss:0.5669	auprc:0.9467	auroc:0.9579	ap@50:0.
	9471	time:79.8			
275					
276	89	loss:0.5658	auprc:0.9451	auroc:0.9573	ap@50:0.
	9451				
277	89	loss:0.5658	auprc:0.9469	auroc:0.9581	ap@50:0.
	9473	time:80.2			
278					

279	90	loss:0.5658 9452	auprc:0.9451	auroc:0.9574	ap@50:0.
280	90	loss:0.5658 9474	auprc:0.9471 time:79.7	auroc:0.9582	ap@50:0.
281					
282	91	loss:0.5651 9452	auprc:0.9452	auroc:0.9575	ap@50:0.
283	91	loss:0.5651 9475	auprc:0.9471 time:79.7	auroc:0.9582	ap@50:0.
284					
285	92	loss:0.5643 9457	auprc:0.9456	auroc:0.9577	ap@50:0.
286	92	loss:0.5643 9477	auprc:0.9474 time:79.8	auroc:0.9584	ap@50:0.
287					
288	93	loss:0.5632 9458	auprc:0.9457	auroc:0.9578	ap@50:0.
289	93	loss:0.5632 9478	auprc:0.9474 time:79.3	auroc:0.9585	ap@50:0.
290					
291	94	loss:0.5624 9458	auprc:0.9458	auroc:0.9579	ap@50:0.
292	94	loss:0.5624 9479	auprc:0.9476 time:79.8	auroc:0.9586	ap@50:0.
293					
294	95	loss:0.5616 9459	auprc:0.9459	auroc:0.9580	ap@50:0.
295	95	loss:0.5616 9481	auprc:0.9477 time:80.2	auroc:0.9587	ap@50:0.
296					
297	96	loss:0.5616 9460	auprc:0.9460	auroc:0.9580	ap@50:0.
298	96	loss:0.5616 9481	auprc:0.9478 time:80.2	auroc:0.9588	ap@50:0.
299					
300	97	loss:0.5606 9462	auprc:0.9461	auroc:0.9582	ap@50:0.
301	97	loss:0.5606 9484	auprc:0.9480 time:79.2	auroc:0.9590	ap@50:0.
302					
303	98	loss:0.5595 9463	auprc:0.9463	auroc:0.9583	ap@50:0.
304	98	loss:0.5595 9484	auprc:0.9480 time:80.2	auroc:0.9590	ap@50:0.
305					
306	99	loss:0.5590 9464	auprc:0.9463	auroc:0.9584	ap@50:0.
307	99	loss:0.5590 9486	auprc:0.9483 time:79.7	auroc:0.9592	ap@50:0.
308					
309	Traceback (most recent call last):				

File - hhh

```
310  File "/home/sangsq/flower/PSEP/model/hhh.py", line 309,
     in <module>
311      model = torch.load(filepath_model)
312  File "/home/sangsq/anaconda3/lib/python3.7/site-packages
     /torch/serialization.py", line 382, in load
313      f = open(f, 'rb')
314 FileNotFoundError: [Errno 2] No such file or directory
     : '../out/tip-add/100ep_model.pb'
315 File: /home/sangsq/flower/PSEP/model/hhh.py
316 Function: train at line 190
317
318 Line # Max usage    Peak usage diff max diff peak   Line
     Contents
319 =====
     =====
320      190                                     @profile
321      191                                     def train
322      ()@:
323      192      344.44M      366.00M      59.09M      64.00M      model
     .train()
324      193
325      194      344.44M      366.00M      0.00B      0.00B
     optimizer.zero_grad()
326      195      853.20M      2.90G      508.76M      2.54G      z =
     model.encoder(data.d_feat, data.dd_train_idx, data.
     dd_train_et, data.dd_train_range, data.d_norm, data.p_feat
     , data.pp_train_indices, data.dp_edge_index, data.
     dp_range_list)
327      196
328      197      853.20M      870.00M      0.00B      -2.05G
     pos_index = data.dd_train_idx
329      198      979.20M      1.10G      126.00M      254.00M
     neg_index = negative_sampling(data.dd_train_idx, data.
     n_drug).to(device)
330      199
331      200      1010.63M      2.45G      31.42M      1.35G
     pos_score = checkpoint(model.decoder, z, pos_index, data.
     dd_train_et)
332      201      1.02G      2.94G      31.42M      504.00M
     neg_score = checkpoint(model.decoder, z, neg_index, data.
     dd_train_et)
333      202
334      203                                     #
     pos_loss = F.binary_cross_entropy(pos_score, torch.ones(
     pos_score.shape[0]).cuda())
335      204                                     #
     neg_loss = F.binary_cross_entropy(neg_score, torch.ones(
     neg_score.shape[0]).cuda())
336      205      1.05G      1.46G      31.42M      -1.48G
     pos_loss = -torch.log(pos_score + EPS).mean()
337      206      1.08G      1.46G      31.42M      0.00B
```

```

336 neg_loss = -torch.log(1 - neg_score + EPS).mean()
337    207      1.08G      1.46G  512.00B      0.00B      loss
338      = pos_loss + neg_loss
339    208
340      loss = pos_loss
341    209
340      210      533.33M      5.89G -571.57M      4.42G      loss.
341      backward()
342    211      533.33M      996.00M      0.00B      -4.92G
343      optimizer.step()
342    212
343      213      533.33M      996.00M      0.00B      0.00B
344      record = np.zeros((3, data.n_dd_et)) # auprc, auroc, ap
344      214      533.73M      996.00M  401.50K      0.00B      for i
345      in range(data.dd_train_range.shape[0]):
345      215      533.73M      996.00M      0.00B      0.00B
346      start, end] = data.dd_train_range[i]
346      216      533.73M      996.00M      0.00B      0.00B
347      p_s = pos_score[start: end]
347      217      533.73M      996.00M      0.00B      0.00B
348      n_s = neg_score[start: end]
348      218
349      219      533.73M      996.00M      0.00B      0.00B
349      pos_target = torch.ones(p_s.shape[0])
350      220      533.73M      996.00M      0.00B      0.00B
350      neg_target = torch.zeros(n_s.shape[0])
351      221
352      222      533.73M      996.00M      0.00B      0.00B
353      score = torch.cat([p_s, n_s])
353      223      533.73M      996.00M      0.00B      0.00B
353      target = torch.cat([pos_target, neg_target])
354      224
355      225      533.73M      996.00M      0.00B      0.00B
355      record[0, i], record[1, i], record[2, i] = auprc_auroc_ap(
355      target,
356      226      533.73M      996.00M      0.00B      0.00B

357      score)
357      227
358      228      533.34M      996.00M -394.00K      0.00B
358      train_record[epoch] = record
359      229      533.34M      996.00M      0.00B      0.00B
359      [auprc, auroc, ap] = record.sum(axis=1) / data.n_dd_et
360      230      533.34M      996.00M      0.00B      0.00B
360      train_out[epoch] = [auprc, auroc, ap]
361      231
362      232      533.34M      996.00M      0.00B      0.00B      print
362      ('{:3d}      loss:{:0.4f}      auprc:{:0.4f}      auroc:{:0.4f}
362      ap@50:{:0.4f}')
363      233      533.34M      996.00M      0.00B      0.00B
363      .format(epoch, loss.tolist(), auprc, auroc, ap)

```

File - hhh

```
363  ))
364      234    344.44M      996.00M -188.90M      0.00B
365      235    533.34M      996.00M      0.00B      0.00B
      return z, loss
366
367
368 Process finished with exit code 1
369
```