PaddlePaddle与娱乐信息推荐服务

2018.11.09

成都

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Tittytainment

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娱乐-幸福度/宜居度

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娱乐方式信息化

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娱乐信息多样化

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信息来源去中心化（轻娱乐）

沙雕网友的回复比营销号搞笑多了_豆瓣

70条回复 - 发帖时间: 2018年7月6日

2018年7月6日 - 沙雕网友的回复比营销号搞笑多了 来自: 林森鹿鸣 2018-07-06 14:48:49 来自豆瓣App 赞 × 加入小组后即可参加投票 确定 回应 转发 赞 收藏 只看楼主 ...

https://www.douban.com/group/t... - 百度快照

这都是什么沙雕网友啊哈哈哈哈哈怎么还没被打死!

这群沙雕网友笑死我了 哈哈哈哈哈哈 一不小心竟然葬礼就办上了! ▼ ▼ 哈哈哈哈哈哈 沙雕沙雕实在是太沙...

https://baijiahao.baidu.com/s?... - 百度快照

网友沙雕不可怕就怕网友有文化,这名字都让你们玩坏了!_搜狐

2018年4月23日 - 叫兽易小星,叫兽易大星,叫兽易个不小星

https://www.sohu.com/a/2292045... - 百度快照

"笑到岔气的朋友圈截图"!迟早有天我会被这届沙雕网友给活活笑死!

2018年8月23日 - 你有186位好友已关注今天小编给你们挖掘一波最新的快乐源泉:让人笑到岔气沙雕朋友圈截图你们感受一波1果然黄袍加身 算命的太准了2最沙雕姐妹3离职申请...

www.yidianzixun.com/ar... - 百度快照

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推荐系统（信息过滤）

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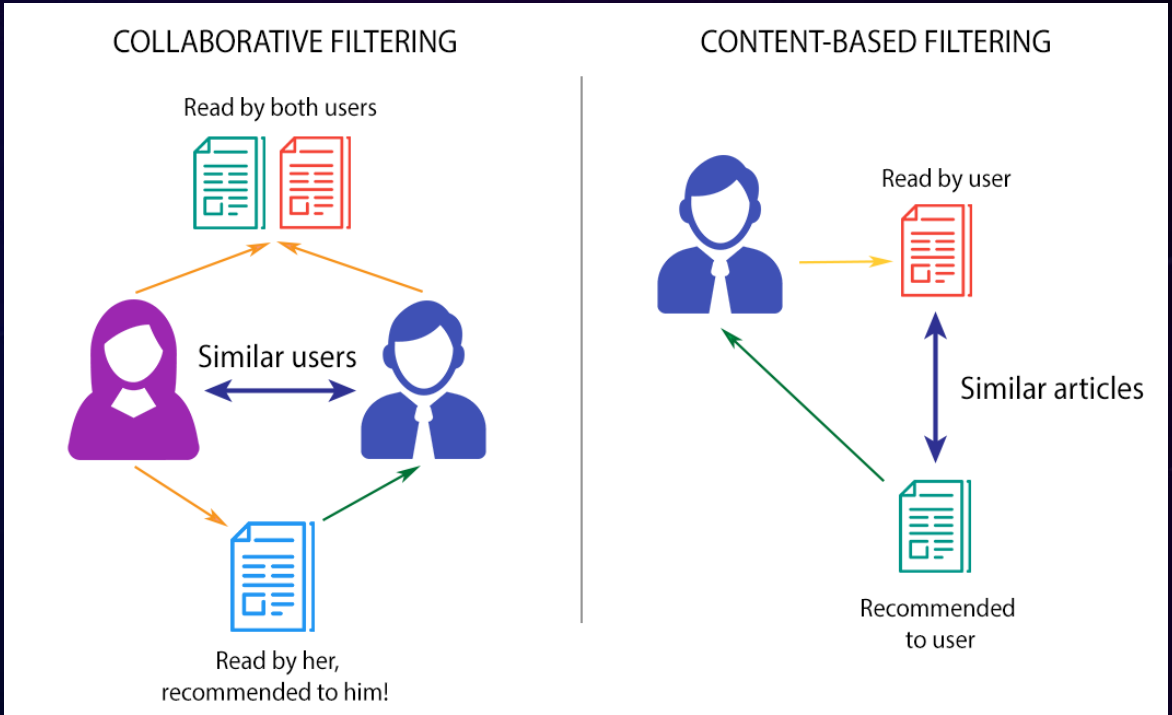
推荐系统基本概念



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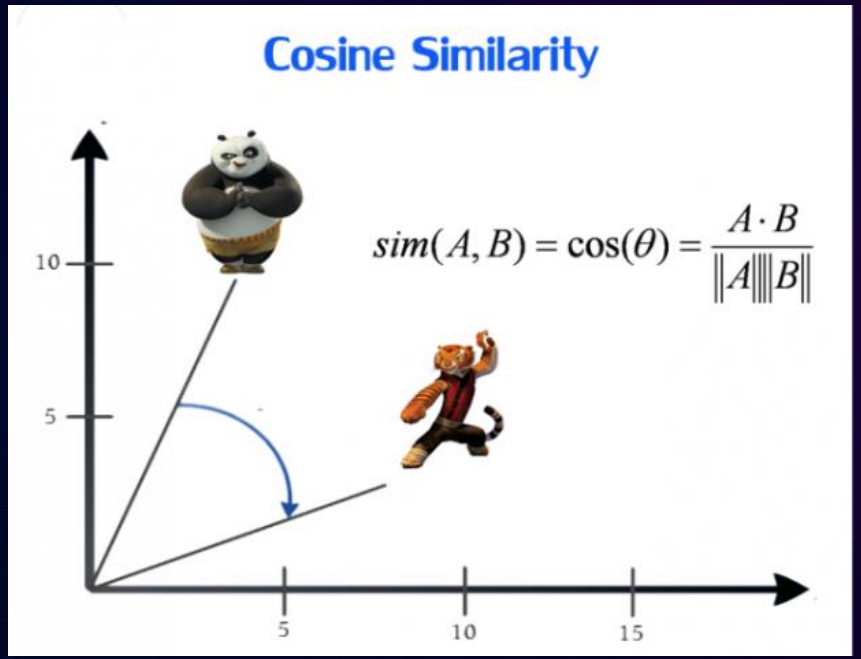
Similarity




```
In [1]:
1 import paddle.fluid as fluid
2 from paddle.fluid import layers

In [2]:
1 a = layers.data(name='a', shape=[2], dtype='float32')
2 b = layers.data(name='b', shape=[2], dtype='float32')
3 sim = layers.cos_sim(a, b)

In [7]:
1 x = np.array([[1,0]], dtype='float32')
2 y = np.array([[0,1]], dtype='float32')

In [8]:
1 exe = fluid.Executor(fluid.core.CPUPlace())
2 exe.run(fluid.default_startup_program())

Output []

In [9]:
1 outs = exe.run(feed={'a':x, 'b':y}, fetch_list=[sim])

In [10]:
1 outs

Output [array([[0.]], dtype=float32)]
```

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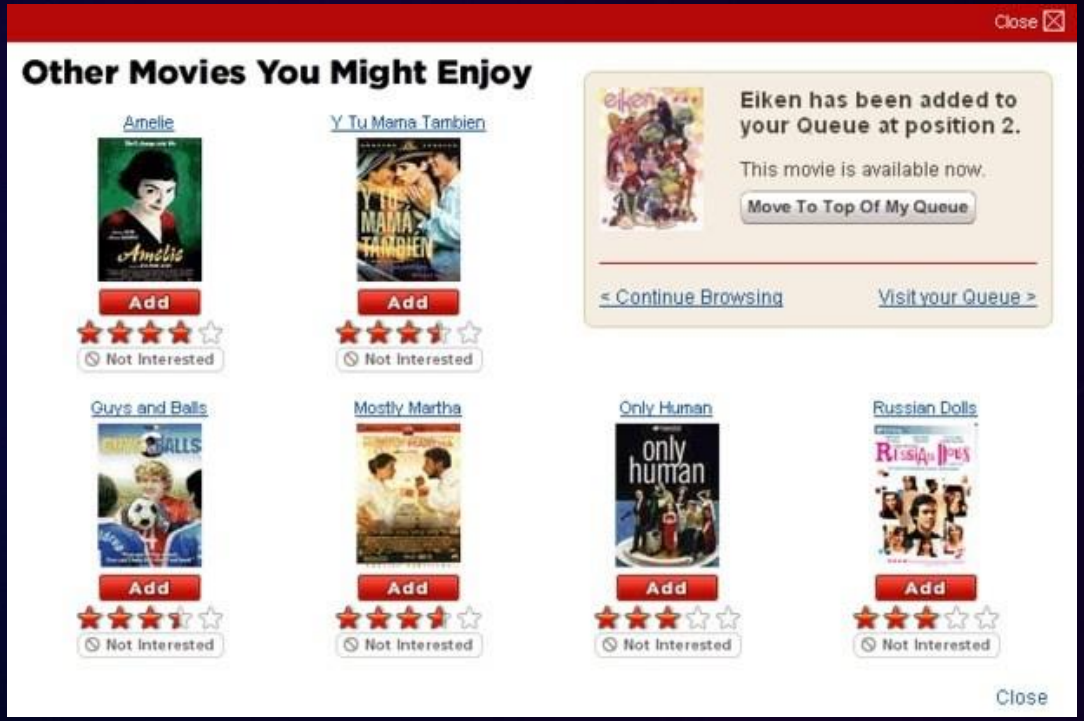
典型推荐服务



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Similarity of Items

- 电影:
  - 类型
  - 国家
  - 导演
  - 主演
  - 年代
  - …

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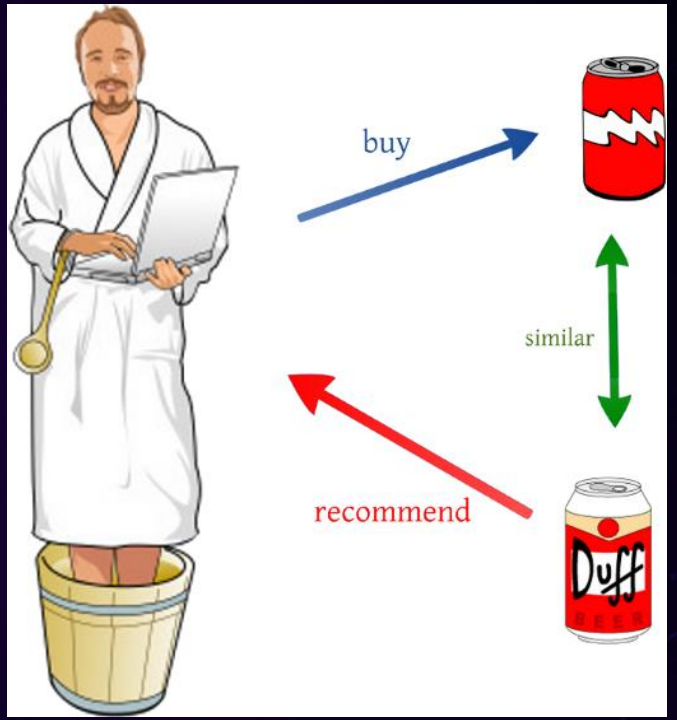
基于内容推荐娱乐信息

- 作品信息不全
- 数据非结构化
- 新类型产生快
- 外在内涵不符



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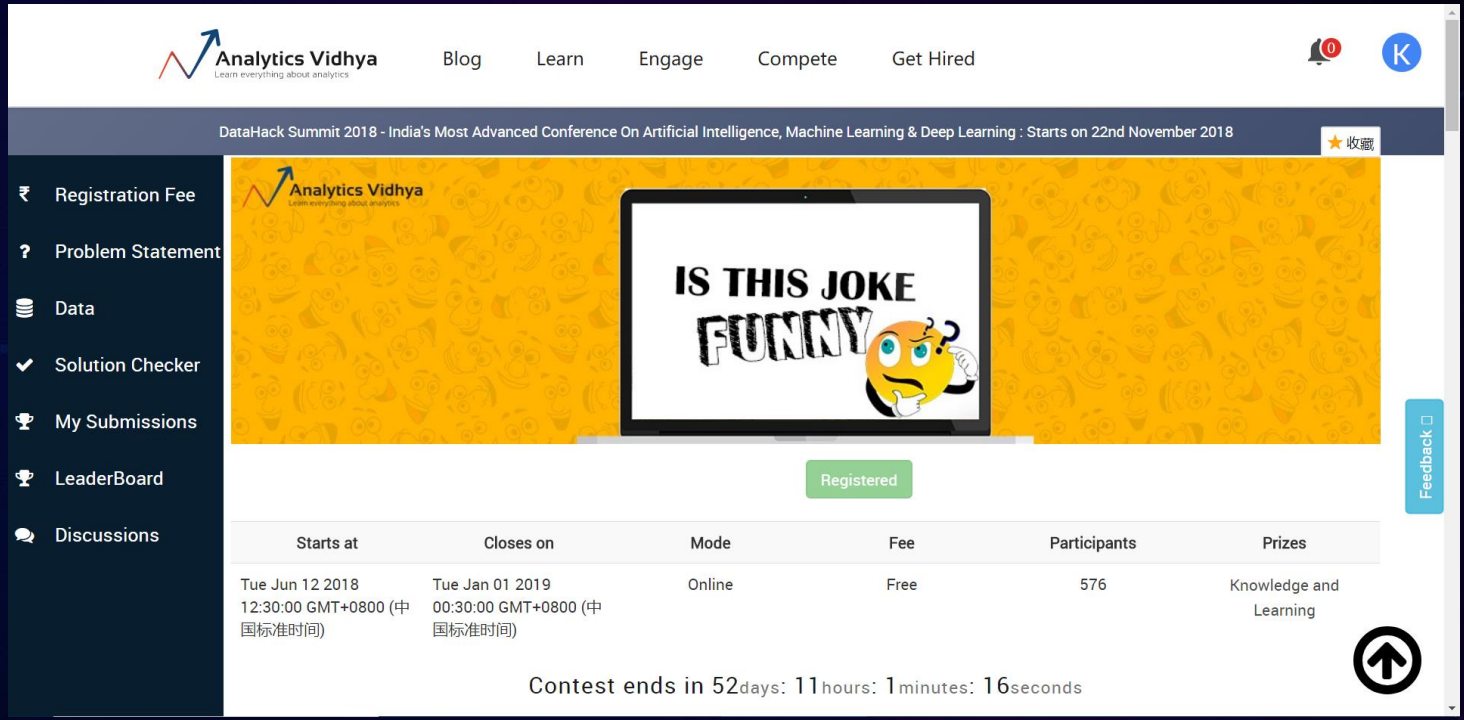
应用案例



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LeaderBoard

Public Leaderboard - Jester Practice Problem: Is this joke funny?

#	Name	Score	Submission Trend
1	AshuGrover	4.0072364495	
2	quavas	4.0687501677	
3	droulez	4.1617951583	
4	anneleroy	4.2279574147	
5	huzefalw	4.3392487482	

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Training set

	A	B	C	D	E	F	G	H	I	J	K
1	joke_id	joke_text									
2	1	Q. What's O. J. Simpson's web address? A. Slash, slash, backslash, slash, slash, escape.									
3	2	How many feminists does it take to screw in a light bulb? That's not funny.									
4	3	Q. Did you hear about the dyslexic devil worshiper? A. He sold his soul to Santa.									
5	4	They asked the Japanese visitor if they have elections in his country. "Every morning," he answers.									
6	5	Q: What did the blind person say when given some matzah? A: Who the hell wrote this?									
7	6	Q. What is orange and sounds like a parrot? A. A carrot.									
8	7	How many men does it take to screw in a light bulb? One. Men will screw anything.									

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Training set

In [65]:
```
df_train_grouped.head()
```

Output

	Rating										...										
joke_id	1	2	3	4	5	6	7	8	9	10	...	130	131	132	133	134	135	136	137	138	139
user_id																					
1	0.219	-9.281	NaN	-6.781	0.875	-9.656	-9.031	-7.469	-8.719	NaN	...	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2	-9.688	9.938	9.531	9.938	0.406	NaN	9.656	NaN	NaN	-9.125	...	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
3	NaN	NaN	-7.219	-2.031	-9.938	NaN	NaN	-9.812	-9.781	NaN	...	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
4	6.906	NaN	-5.906	NaN	NaN	3.875	6.219	NaN	6.094	5.406	...	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
5	-0.031	NaN	NaN	7.500	-7.219	NaN	NaN	NaN	3.656	NaN	...	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

5 rows × 139 columns

In [66]:
```
df_train_grouped.describe()
```

Output

	Rating											
joke_id	1	2	3	4	5	6	7	8	9	10	...	130
count	387.00000	27361.000000	27369.000000	27368.000000	27402.000000	27498.000000	27325.000000	27485.000000	27125.000000	373.000000	...	3693.000000
mean	-2.24677	-1.933251	-0.671942	-0.604674	-1.415667	-1.612601	0.707071	-0.083083	0.767258	-0.447067	...	0.607993
std	5.22313	5.320287	5.109264	5.370402	5.275072	5.353780	5.252075	5.081519	5.237017	5.739532	...	6.052237

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笑话两则

- 刘备、诸葛亮、孙权和曹操坐飞机出去旅游，遇上事故，却只有三个降落伞。诸葛亮提议：“我提问，你们回答，谁答不上来就没有降落伞。” 三人同意。
  - 问刘备：“周于何处灭商？”，“牧野”
  - 问孙权：“战死者几何？”，“十万”
  - 问曹操：“死者姓甚名谁？”，“……”
  - 曹操，卒。
- 唐僧、孙悟空、猪八戒、沙僧骑白马出去取经，遇上饥荒，却只有三个馒头。唐僧提议：“我提问，你们回答，谁答不上来就没有馒头。” 三人同意。
  - 问悟空：“天上有几个太阳？”，“一个”
  - 问沙僧：“有几个月亮？”，“一个”
  - 问八戒：“有几个星星？”，“……”
  - 八戒，转世。

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Trial 1: all zero

20	kaiserwang	5.5164622449
20	rishabh98	5.5164622449
22	Sayan_C	5.9353467960
23	vaibhavkrshn	6.2048720515
24	rohan985	6.2810727778

Trial2: Content-based

19	kaiserwang	5.1846817714	
20	rajat5ranjan	5.4707819635	
21	rishabh98	5.5164622449	
22	Sayan_C	5.9353467960	
23	vaibhavkrshn	6.2048720515	
24	rohan985	6.2810727778	

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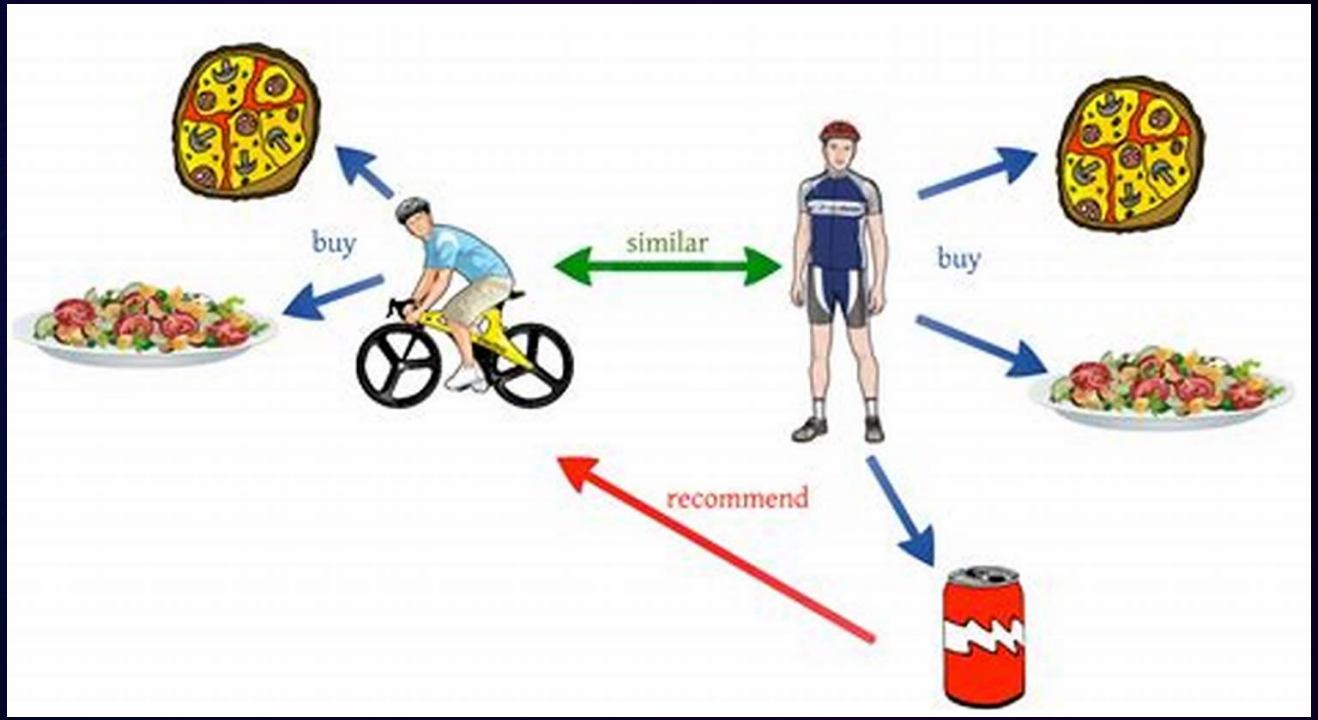
协同过滤



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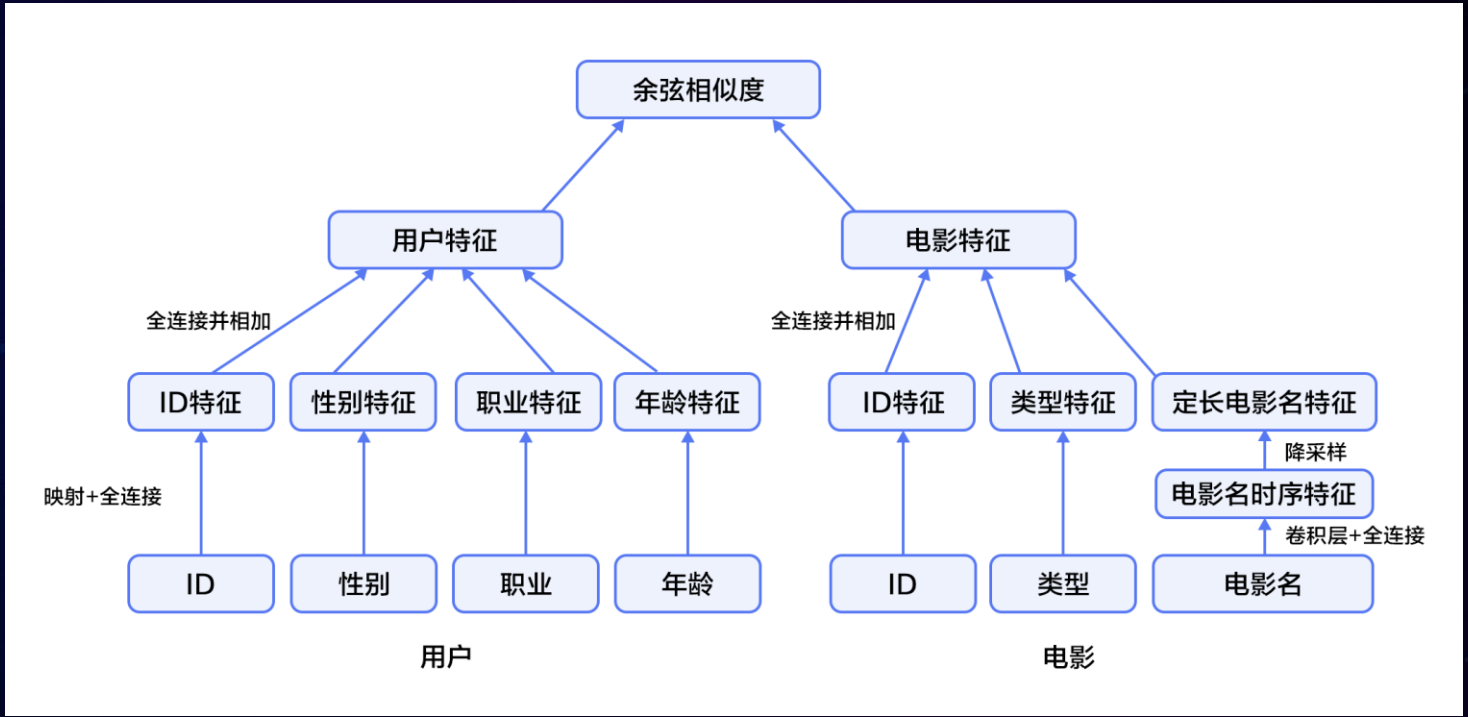
Hybrid model in Paddle



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