cf改进方案

赵海臣



去除流行度降权

去除流行度降权后,虽然cf的长尾挖掘效果降低,但是推荐召回率、 精确度、销售额都有明显的提升。



去除流行度降权的CF





去除流行度降权的CF

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solowRank = 0, highRank = 19
 = (0.339469)[0.006476][5655657.483086][0.778899][1.000000][1.000000][8.436760][8.436760][0.044100][0.142030] \\ + (0.339469)[0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476][0.006476]
。***********************推荐[_CF_test] **************
≪lowRank = 20, highRank = 39
≪lowRank = 40, highRank = 59
******* [0.022822][0.000546][383818.520432][0.767938][1.000000][1.000000][10.838790][10.838790][0.005710],[0.023411] ***********
≪lowRank = 60, highRank = 79
****** [0.016251][0.000377][267242.840297][0.762535][1.000000][1.000000][11.158783][11.158783][0.003780],[0.015211]
≪lowRank = 80, highRank = 99
****** [0.013069][0.000293][198882.750189][0.763956][1.000000][1.000000][11.507446][11.507446][0.002460],[0.010691]
```



标准CF

| ≪************************************ |
|--|
| ******* 召回,准确率,銷售額,top10覆盖率,top50覆盖率,top100覆盖率,top50多样性,top100多样性,2个以下百分比,4个以下百分比************************************ |
| * * * * * |
| [0.410266][0.008307][6990318.643489][0.402697][0.788954][1.000000][13.774388][21.609906][0.005260],[0.020 020] ******************************* |
| ≪************************************ |
| ≪****** 召回,准确率,銷售額,top50覆盖率,top100覆盖率,top50多样性,top100多样性*********************************** |
| ****** [0.073546][0.001505][1535240.763065][0.006252][0.012503][27.000000][37.000000] ********* |
| ≪************************************ |
| |
| ****** [0.188712][0.003409][2737023.133091][0.006252][0.012503][21.000000][27.000000] ******************************* |
| ≪************************************ |
| |
| ****** [0.248149][0.004302][3142282.812500][0.006252][0.012503][19.000000][28.000000] ******************************* |



标准CF

| ⊸lowRank = 0, highRank = 19 |
|---|
| |
| ****** [0.339117][0.006590][5709055.122993][0.750137][1.000000][1.000000][7.387354][7.387354][0.087761],[0.249092] ************************************ |
| 《*******推荐[_CF_test] ************************************ |
| ⊸lowRank = 20, highRank = 39 |
| |
| ****** [0.031711][0.000779][571289.050332][0.754254][1.000000][1.000000][8.040622][8.040622][0.076503],[0.217609] ************************************ |
| |
| olowRank = 40, highRank = 59 |
| ****** 召回,准确率,銷售額,top10覆盖率,top50覆盖率,top100覆盖率,top50多样性,top100多样性,2个以下百分比,4个以下百分比************************************ |
| (0.017062)[0.000411][307049.969931][0.754987][1.000000][1.000000][8.456057][8.456057][0.059154],[0.176771] |
| |
| olowRank = 60, highRank = 79 |
| ****** 召回,准确率,銷售額,top10覆盖率,top50覆盖率,top100覆盖率,top50多样性,top100多样性,2个以下百分比,4个以下百分比************************************ |
| |
| ******************推荐[_CF_test] ************************************ |
| ⊸lowRank = 80, highRank = 99 |
| ****** 召回,准确率,銷售額,top10覆盖率,top50覆盖率,top100覆盖率,top50多样性,top100多样性,2个以下百分比,4个以下百分比************************************ |
| ****** [0.009961][0.000233][178685.560102][0.752189][1.000000][1.000000][9.363213][9.363213][0.028553],[0.112870] ************************************ |



THE END

THANK YOU!

