

Collaborative filtering RS = thuật toán tu v an dua tren cong tac

Neighborhood Collaborative filtering == memory-based collaborative filtering: scalability (t ính mở r ộng)

Model-based collaborative filtering: User-item rating matrix → model --> predict.

Association rule (lu ật kết h ợp).

Transaction:

I1 A,C,B

I2 C,D,E

I3 E,G,H → C→B:0.6; D,E→C:0.5; E,G→M:0.7

I4 K,L,M

Offline:

	I1	I2	I3	I4	I5
U1		2	3	4	5
U2	2		1	5	4
U3	1		2	3	
U4		1	1	4	

Transaction 1 I2_2, I3_3, I4_4, I5_5

Transaction 2 I1_2, I3_1, I4_5, I5_4

Transaction 3 I1_1, I3_2, I4_3

Transaction 4 I2_1, I3_1, I4_4



I2_2,I3_3 → I1_4: 0.7

I4_4,I2_1 → I2_5:0.4

I5_5 → I1_1:0.8

I4_4 → I3_2:0.7

I4_4 → I1_3:0.7

Online:

$$r_{u1,i1} = (0.7*4 + 0.8*1+0.7*3)/(0.7+0.8+0.7)$$

