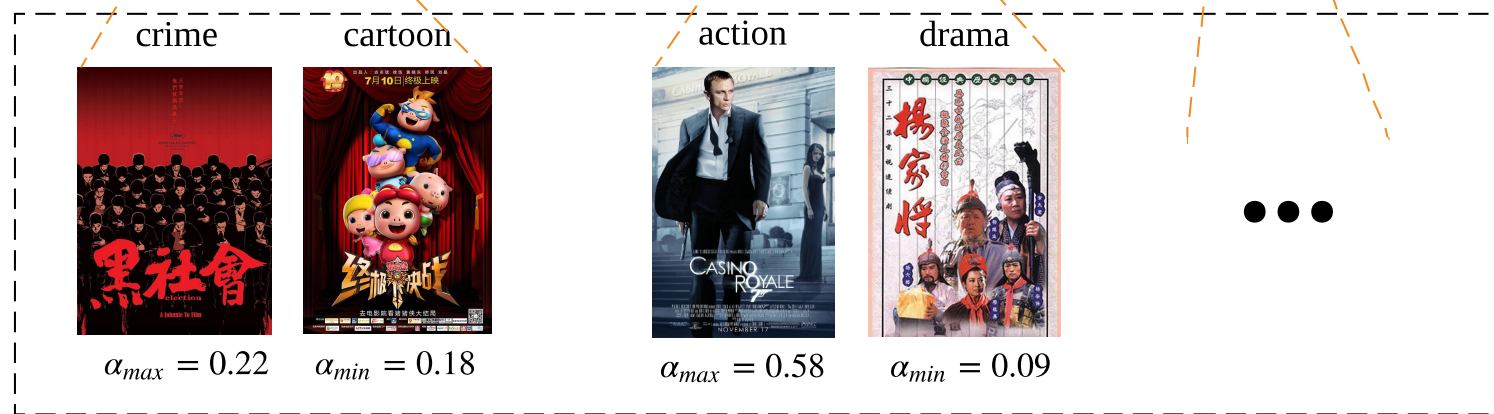
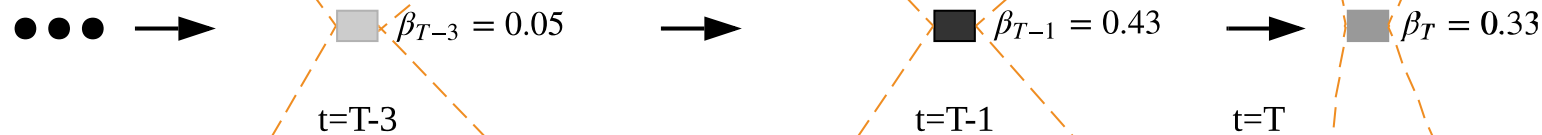


user-side (1-hop)



item-side (2-hop)

target user



$y = 1, \hat{y} = 0.897$

target item



name: American sniper
genre: action/adventure/war