ABSTRACT

MULTI-WINDOW TIME-AWARE PERSONALIZED RECOMMENDATION SYSTEM

A multi-window time-aware personalized recommendation system and method is provided. The system includes a memory having computer-readable instructions stored therein. The system further includes a processor configured to access purchase history of one or more users and to select a pair of items purchased by the one or more users based on the purchase history. The processor is further configured to determine a contributory affinity value between a first item and a second item of the selected pair of items for each of the one or more users. The contributory affinity value is determined based on a first time-decay function and a second time-decay function associated with purchase times of the first and second items. In addition, the processor is configured to combine the contributory affinity values for each of the one or more users to estimate the affinity value between the first and second item across multiple time-windows.

(Figure 1)