HYPNER: a hybrid approach for personalised news recommendation

ABSTRACT

A personalised news recommendation system extracts news set from multiple press releases and presents the recommended news to the user. In an effort to build a better recommender system with high accuracy, this paper proposes a personalised news recommendation framework named Hybrid Personalised NEws Recommendation (HYPNER). HYPNER combines both collaborative filtering-based and content-based filtering methods. The proposed framework aims at improving the accuracy of news recommendation by resolving the issues of scalability due to large news corpus, enriching the user's profile, representing the exact properties and characteristics of news items, and recommending diverse set of news items. Validation experiments showed that HYPNER achieved 81.56% improvement in F1 -score and 5.33% in diversity as compared to an existing recommender system, SCENE.

Keyword: Collaborative filtering; Content-based filtering; News recommendation; Personalised news recommendation