A Tourism Destination Recommender System Based on Fuzzy Clustering and Collaborative Filtering Using Real-Time and Static Destination Features

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Abstract

With the recent advancements of the Internet and the increasing use of its applications in various industries and markets, they faced a major transformation. Companies and businesses in different fields and sectors have attempted to adopt new approaches by using modern technologies to remain competitive. The tourism industry has experienced significant changes with the growing use of the Internet. Due to these changes, nowadays people can communicate more easily and they can share their thoughts and experiences about tourism destinations, just by using social media platforms. In addition, many tourism-related services such as, buying tickets or reserving hotels have become accessible online, and people have access to use them without the need of physical attendance. This trend, gained even more attention after the outbreak of the COVID-19 pandemic. Given the large volume of related data and the increasing digitization of services, there is an opportunity to personalize tourism service experiences for users and recommender systems play a crucial role in this case. Recommender systems can be used for selecting travel destinations and visiting tourist attractions. In this project, a method is proposed for building a hybrid recommender system by combining user-based and content-based collaborative filtering techniques, utilizing both real-time and static data to recommend cities as travel destinations.