

An Effective Recommendation Technique in Tourism

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ABSTRACT

The recent past showed a greater interest in recommender techniques. Now a days there are many travel packages existing from different websites to almost all the places over the world. In order to select the best package to certain destination, there is no efficient recommendation system available. To overcome this problem, we are coming up with Travel Package Recommendation System where you can select the best package. This project will help tourist to suggest the best Travel Package among all the package deals on the web. Initially, we will evaluate the particular characteristics of the current traveling packages and we mine the data on the tourists requirements and the intrinsic features i.e., locations, travel seasons etc. Based on the data collected after mining, we will generate a list for personalized travel package recommendations. Furthermore, we extend the system to show the details about any of the recommended packages.

Keyword: Tourist, Travel package, personalized suggestion, effective recommender technique.

1. INTRODUCTION

Tourism can be considered as most favorite pass time when people get free time. Several travel organizations are available on the web. The people or the tourist selects travel package according to their personal interest. The travel companies concentrate on the interest associated with tourist making sure to increase their particular market value and supply enormous package deals. So that they can make their Travel Package more effective. Now-a-days recommender system is becoming very famous and people are getting attracted to it, as it is helping them to choose the best package in a short time.

A customer finds it very difficult to search for the best package as he/she has to browse multiple websites, contact many travel agents and etc. which is a tedious process and is time consuming. There should be a system where the user should find the best package on the Internet with a single click. A tourist has to select a package based on season and location. For example, if a tourist wants to visit 'Landscapes' in 'Winter' season, then there will an option of

choosing place and season. Therefore, through this a tourist can customize their package accordingly. This feature is implemented by using Tourist, Area and Season Model which can effectively capture the unique characteristics of travel data and also captures the relationships among the tourists which implements the better performance of travel package recommendation. This approach is much better than the traditional techniques [7]. The goal of the personalized travel package recommendation represents the Travel Packages and interest of the tourists.

2. RELATED WORK

Recommender systems are information search and decision support tools used when there is an overwhelming set of options to consider or when the user lacks the domain-specific knowledge necessary to take autonomous decisions. They provide users with personalized recommendations adapted to their needs and preferences in a particular usage context. In[3], author presented an approach for integrating recommendation and electronic map technologies to build a map-based conversational mobile recommender system that can effectively and intuitively support users in finding their desired products and services.

When visiting cities as tourists, most of the times people do not make very detailed plans and, when choosing where to go and what to seem they tend to select the area with the major number of interesting facilities. Therefore, it would be useful to support the user choice with contextual information presentation, information clustering and comparative explanations of places of potential interest in a given area. In[4] authors illustrated how MyMap, a mobile recommender system in the Tourism domain, generates comparative descriptions to support users in making decisions about what to see, among relevant objects of interest.

In[5] author have presented UbiquiTO, an expert tourist guide for mobile users that adapts the content provided and the interaction to the user interests and to the device used, as well as to the physical location and other context conditions. They provided a detailed description of the major aspects of the system, with particular attention to

the approaches exploited for building and updating the User Model, the multi-modal elicitation of the user's position, and the various adaptation strategies implemented by the system.

Intelligent systems sense their environment and learn from the actions they implement to reach specific goals. They are increasingly used to support tourist information search and decision making as well as work processes. In order to model the tourism domain, these systems require a profound understanding of its nature. Looking at existing literature in tourism, the paper[9] discusses critical gaps in the knowledge of the field to be filled so that intelligent system design can be informed and impacts understood. Specifically, it discusses the need to better conceptualize technology in tourism research and argues for a focus on uses and interactions.

3. PROPOSED SYSTEM

The basic concept of our proposed work is to identify the location and preferences including the duration of time, and destination type. We are proposing a method for improving the application quantity for helping the tourist.

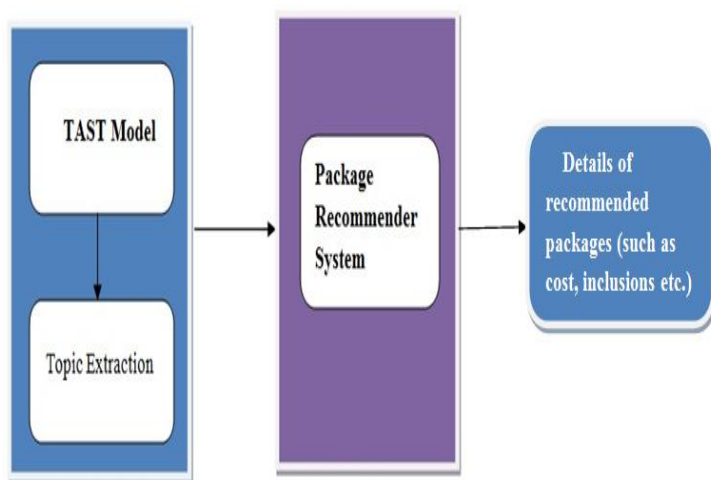


Fig: System architecture of recommender system

3.1 Tourist-Area-Season-Topic model:

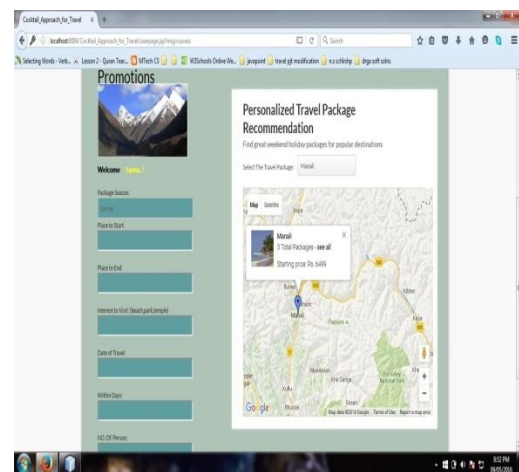
Travel time and traveling areas are divided into distinct seasons and locations. Based on these factors, we develop a Tourist-Area-Season Topic Model which represents distinct distributions of a topic model in a travel package. The content of the travel packages and the interests of the tourists represents the intrinsic features such as locations, travel seasons etc., where the tourist's topic is mined. A personalized travel package recommendation is developed which is based on TAST Model.

3.2 A Hybrid Recommendation Technique:

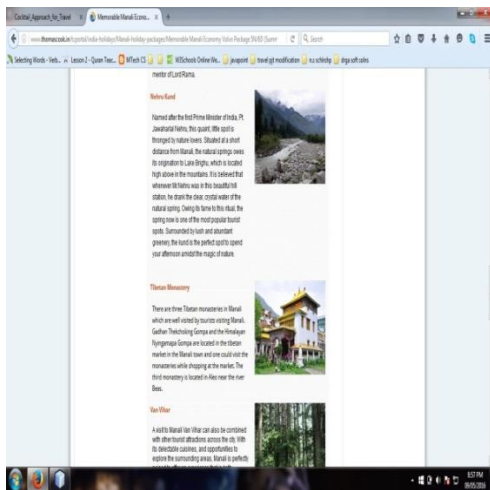
In this approach, we use the list of topic distribution which was generated in TAST model. For personalized travel package recommendation, the data is displayed for location and price. As the tourist selects the package based on location or price, the data is updated in the database and the admin or the users can view the people who has selected a package based on a particular location or a particular price. It is important for the user, as it helps the users in deciding the location based on the popularity of the location and also it helps when pricing plays a major role in deciding a package. It will give admin a perspective about the Travel packages which was added as it will be useful for the admin to add future packages based on the popularity of the location and the price the users have selected. Extension to this system is provided by showing details of any among the recommended package.

4. RESULTS

Below shown figures represents (a) list of recommendations for tourist (b)inclusions of tourist's preference.



(a)



(b)

5. CONCLUSION

There is need to understand the different sets of users interest to provide a suitable package. While recommending the travel package different topics and related information is analyzed. Then develop the TAST model which outputs the topic and season recommendation. It finds the tourist interest for recommending package. It also discovers tourist interest and gives the spatial-temporal correlations for landscapes. The TAST model is utilized to build new approach for personalized recommendation for travel package. The new approach is based on hybrid recommendation strategy. The proposed cocktail recommendation approach works very well for predicting the tourists' travel preferences by exploiting the unique characteristics of the travel package data.

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