iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 10 **Issue:** III **Month of publication:** March 2022

DOI: https://doi.org/10.22214/ijraset.2022.40739

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 10 Issue III Mar 2022- Available at www.ijraset.com

Graph Based Personalized Travel Recommendation Using Data Mining Technique Collaborative Filtering Algorithm

Miss. Samradni Deshmukh[1], Prof. K. R. Ingole[2]
[1]PG Scholar, [2]Professor, Computer Science & Engineering Sipna College Of Engineering And Technology, Amravati, Maharashtra, INDIA

Abstract: ***The recommendation system has growth choices in recent years. The recommendation system is exist in many applications which gives online travel information for individual travel package. A new model named travel recommendation using data mining techniques which extracts the features like locations, travel seasons of various landscapes. Thus it possesses the material of the travel packages and interests of tourists. Further extending E-TRAST model with the tourist-relation-area season topic model includes relationship with tourists. It includes mining significant tourist locations based on the user search trajectories of users on web and also derives a personalized travel algorithm recommendation system using travelogues and users contributed photos with metadata of this photo by comparing existing different technique. To suggest personalized POI sequence, first famous routes are stratified as per the similarity between user package and route package.***
Keywords: Travel package, recommender systems, cocktail, topic modeling, and collaborative filtering

I. INTRODUCTION

As an emerging growth in travel companies provide which now provides online services. However, the rapid rush of online travel information imposes an increasing challenge for tourists who want to choose from a large number of available travel packages for satisfying their individual needs. Moreover, to increase the profit, the travel companies have to understand the preferences from different tourists and publish more affordable packages to tourist. Therefore, the demand for intelligent travel services is expected to increase dramatically. Since recommender systems have been successfully applied to enhance the quality of service in a number of fields it is the natural choice to provide travel package recommendations

II. LITERATURE SURVEY

[1] In this paper, we existing research about personal journey package advice. Exclusively, we very first examined the unique qualities connected with journey plans along with formulated the particular TAST product, a new Bayesian system intended for journey package along with vacationer manifestation. The TAST product can certainly find the hobbies from the holidaymakers along with draw out the particular spatial-temporal correlations amid scenery. And then, we used the particular TAST product intended for making a beverage method about personal journey package advice. This kind of beverage method follows a new hybrid car advice technique along with is able to incorporate a Volume 1, Issue 5, October 2015 Copyright to IJASMT www.ijarsmt.com 6 number of restrictions existing inside real-world circumstances. Moreover, we extensive the particular TAST product for the TRAST product, which could record the particular interactions amid holidaymakers within just about every journey group. Eventually, the empirical research ended up being carried out about real-world journey files. Fresh outcomes prove that this TAST product can certainly record the unique qualities from the journey plans, the particular beverage method can result in far better shows connected with journey package advice, plus the TRAST product can be employed being an powerful evaluation intended for journey group automatic sourcing. Produce your own . these kind of telling outcomes can result in many upcoming do the job.

[2]. In this paper, we present study on personalized travel package recommendation. Specifically, we first analyzed the unique characteristics of travel packages and developed the TAST model, a Bayesian network for travel package and tourist representation. The TAST model can discover the interests of the tourists and extract the spatial-temporal correlations among landscapes. Then, we exploited the TAST model for developing a cocktail approach on personalized travel package recommendation. This cocktail approach follows a hybrid recommendation strategy and has the ability to combine several constraints existing in the real-world scenario. Furthermore, we extended the TAST model to the TRAST model, which can capture the relationships among tourists in each travel group. Finally, an empirical study was conducted on real-world travel data.

©IJRASET: All Rights are Reserved

Experimental results demonstrate that the TAST model can capture the unique characteristics of the travel packages, the cocktail approach can lead to better performances of travel package recommendation, and the TRAST model can be used as an effective assessment for travel group automatic formation. We hope these encouraging results could lead to many future work.

[3]. In this paper the interests of the tourists and extract the spatialtemporal correlations among landscapes are discovered by TAST model. Then, the output of E-TRAST model, i.e. topic distributions for developing a recommended approach on personalized travel package recommendation. The E-TRAST model captures the relationships among tourists in each travel group. Also, a tourist recommendation strategy developing Geo-tagged photos to find the tourist locations within a city and integrates the Geo-tagged photos ofon social media sites. The so far problem analysis is related to the drawbacks in previous works and also going to be used in the proposed system.

[4]. In this paper, we have presented an inductive approach to recommendation. This approach has been evaluated via experiments on a large, realistic set of ratings. One advantage of the inductive approach, relative to other social-filtering methods, is that it is far more flexible; in particular it is possible encode collaborative and content information as part of the problem representation, without making any algorithmic modifications. Exploiting this flexibility, we have evaluated a number of representations for recommendation, including two types of representations that make use of content features. One of these representations, based on hybrid features, significantly improves performance over the purely collaborative approach. We have thus begun to realize the impact of multiple information sources, including sources that exploit a limited amount of content. We believe that this work provides a basis for further work in this area, particularly in harnessing other types of information content.

III. SYSTEM DIAGRAM

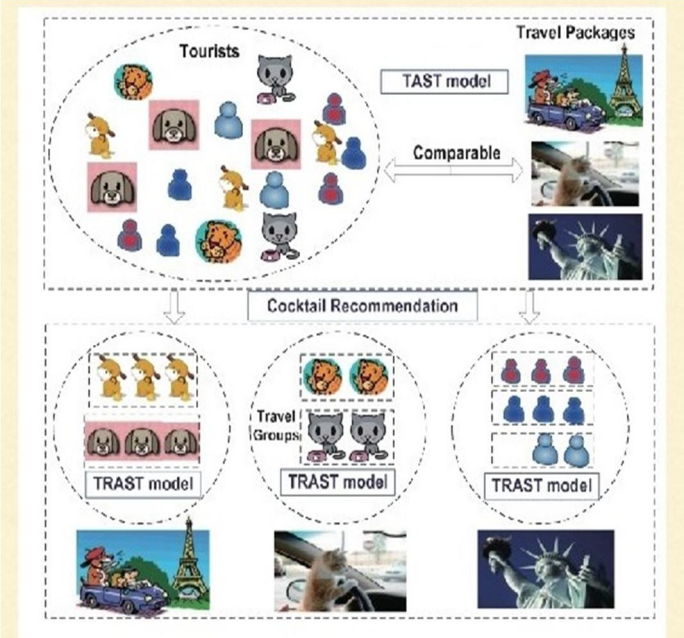


Fig : Travel Recommendation system using data mining techniques

IV. CONCLUSION

In this paper the interests of the tourists and extract of the spatialtemporal correlations among landscapes are discovered by Data mining techniques. The output of Data mining techniques. i.e. topic distributions for developing a recommended approach on personalize travel package recommendation. The Data mining techniques captures the relationships among tourists in each travel group. The so far problem analysis is related to the drawbacks in previous works and also going to be used in the proposed system

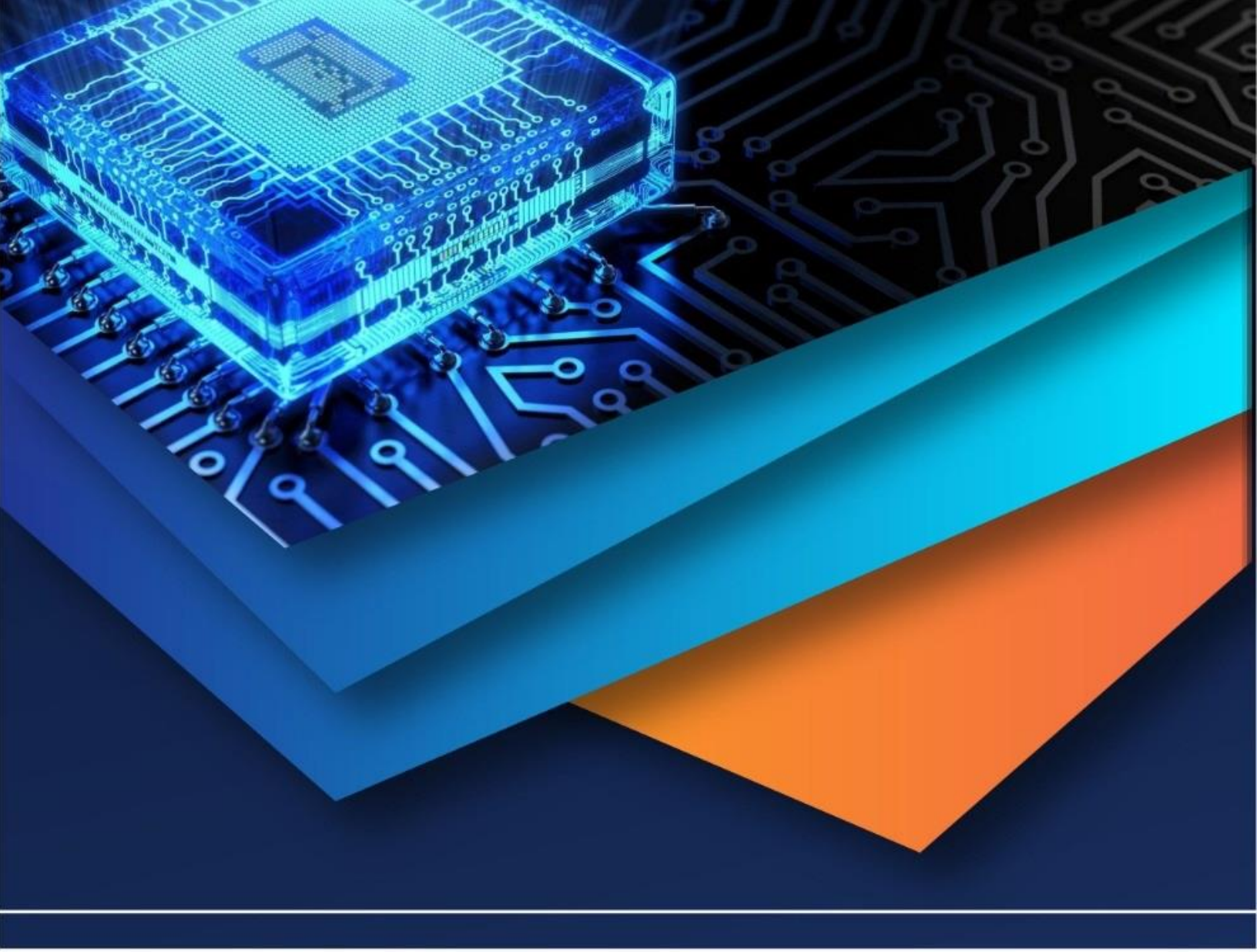
V. ACKNOWLEDGEMENT

First and foremost, I would like to express my sincere gratitude to my **PROF. K. R. INGOLE** who has in the literal sense, guided and supervised me. I am indebted with a deep sense of gratitude for the constant inspiration and valuable guidance throughout the work.

REFERENCES

[1] Rameshwar Shinde 1 ,Snehal Patil2 ,Abhishek Dhatingan3 ,Shimpi Gayatri4 ,Prof.S.S.Fule5 A "Collaborative Approach for Travel Package Recommendation" Volume 1, Issue 5, October 2015
[2] Qi Liu, Enhong Chen, Senior Member, IEEE, Hui Xiong, Senior Member, IEEE, Yong Ge, Zhongmou Li, and Xiang Wu "A Cocktail Approach for Travel Package Recommendation" IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING, VOL. 26, NO. 2, FEBRUARY 2014
[3] B.D. Carolis, N. Novielli, V.L. Plantamura, and E. Gentile, "Generating Comparative Descriptions of Places of Interest in the Tourism Domain," Proc. Third ACM Conf. Recommender Systems (RecSys '09), pp. 277-280, 2009.
[4] Chumki Basu* Bell Communications Research 445 South Street Morristown, NJ 07960-6438 cbasu@bellcore.com Haym Hirsh Department of Computer Science l~utgers University Piseataway, NJ 08855 hirsh@cs.rutgers.edu William Cohen AT&T Laboratories 180 Park Ave, Room A207 Florham Park, NJ 07932 wcohen@research.att.eo.com "Recommendation as Classification: Using Social and Content-Based Information in Recommendation"
[5] D. Agarwal and B. Chen, "fLDA: Matrix Factorization through Latent Dirichlet Allocation," Proc. Third ACM Int'l Conf. Web Search and Data Mining (WSDM '10), pp. 91-100, 2010
[6] O. Averjanova, F. Ricci, and Q.N. Nguyen, "Map-Based Interaction with a +Conversational Mobile Recommender System," Proc. Second Int'l Conf. Mobile Ubiquitous Computing, Systems, Services and Technologies (UBICOMM '08), pp. 212- 218, 2008
[7] D.M. Blei, Y.N. Andrew, and I.J. Michael, "Latent Dirichlet Allocation," J. Machine Learning Research, vol. 3, pp. 993-1022, 2003
[8] R. Burke, "Hybrid Web Recommender Systems," The Adaptive Web, vol. 4321, pp. 377-408, 2007 [7] B.D. Carolis, N. Novielli, V.L. Plantamura, and E. Gentile, "Generating Comparative Descriptions of Places of Interest in the Tourism Domain," Proc. Third ACM Conf. Recommender Systems (RecSys '09), pp. 277-280, 2009
[9] F. Cena et al., "Integrating Heterogeneous Adaptation Techniques to Build a Flexible and Usable Mobile Tourist Guide," AI Comm., vol. 19, no. 4, pp. 369-384, 2006
[10] W. Chen, J.C. Chu, J. Luan, H. Bai, Y. Wang, and E.Y. Chang, "Collaborative Filtering for Orkut Communities: Discovery of User Latent Behavior," Proc. ACM 18th Int'l Conf. World Wide Web(WWW '09), pp. 681-690, 2009
[11] G. Adomavicius and A. Tuzhilin, "Toward the Next Generation of Recommender Systems: A Survey of the State-of-the-Art and Possible Extensions," IEEE Trans. Knowledge and Data Eng., vol. 17,no. 6, pp. 734-749, June 2005

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)