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A Survey on a Places Recommendation on User Entered Query Based on POI

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ABSTRACT: On web big data are increases in both industrial and research area such as health care, financial services and commercial recommendation. The personalized travel recommendation work on user's personal requirements, community-contributed photos and heterogeneous metadata related this photo. The existing system cannot work on the user's requirements and cannot automatically mine user travel interest. The personalized travel sequence map both users and routes textual descriptions to the topical package space to get user topical package model and route topical package model. Topical package space including representative tags, distribution of cost, visiting time and visiting season of each topic. We used the Facebook data to find out the user's point of interests. To recommend personalized POI sequence first find out the famous routes are rank according to the similarity between users package and route package.

KEYWORDS: Check-in, geo-tagged photos, GPS, social media, multimedia information retrieval. Online interest, Travel recommendation.

I. INTRODUCTION

Automatic travel recommendation is an important problem in research and industrial area. In general, travel recommendation, the basic drawback is the points of interests are not automatically mine. Moreover, provide only the famous route mining but without automatically mining user travel interest. Big media such as social media like Facebook, twitter, offers great opportunities to solution of many challenging problems, for instance, GPS estimation and travel recommendation. In the automatic travel recommendation, two main challenges are given, first is the recommended point of interest should be personalized to user interest means different users may prefer different types of POIs. Second challenge is important to recommend the sequential travel route rather than individual point of interest. In existing system, travel recommendation mining famous travel point of interest and routes are mainly four types of big social media such as GPS trajectory, check-in-data, geo tags and blogs. Therefore, this route planning cannot meet the user's personal requirements. Nevertheless, in personal travel recommendation recommends the POIs and routes by mining user travel records. Moreover, mine the point of interest using social media.

II. MOTIVATION

The general travel recommendation is not fulfilled the users requirements and not mined the point of interest. They provided famous routes but without automatically mining users travel interest. Therefore, we proposed the personal travel sequence recommendation for to fulfill the user's requirements and they mined automatically point of interest from social media. Here we have used the Facebook as a social media. We consider not only users topical interest but also the consumption capability and preference of visiting time and season. In addition, recommend the sequential travel routes.

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III. REVIEW OF LITERATURE

1. Shuhui Jiang, XuemingQian , Tao Mei and Yun Fu “Personalized Travel Sequence Recommendation on Multi-Source Big Social Media” in 2016.
This paper proposed a personalized travel sequence recommendation system by learning topical package model from big multi-source social media: travelogues and community contributed photos. The advantages of this system are automatically mined user’s and routes’ travel topical preferences including the topical interest, cost, time and season. They recommended not only POIs but also travel sequence. In addition, disadvantage is Small dataset. Only famous city are included.
2. JungeShen, JialieShen, Tao Mei, and XinboGao,” Landmark Reranking for Smart Travel Guide Systems by Combining and Analyzing Diverse Media” in 2016.
This paper present a novel query-dependent landmark ranking system based on heterogeneous travel information fusion to facilitate a smart travel guide. This system gets the initial ranking list of landmarks via text matching. The advantage is, maximize the satisfaction and minimize the information load. Less efficiency is a disadvantage of this paper.
3. Shuhui Jiang, XuemingQian, JialieShen, Yun Fu, and Tao Mei,” Author Topic Model-Based Collaborative Filtering for Personalized POI Recommendations” in 2015.
The basic concept is an author topic model-based collaborative filtering (ATCF) method is proposed to facilitate comprehensive points of interest (POIs) recommendations for social users. The advantage is similar travel topics are shared. The disadvantage is,dataset is small. Only textual information of geo-tagged is given.
4. HuijiGao, Jiliang Tang, Xia Hu, and Huan Liu, “Content-Aware Point of Interest Recommendation on Location-Based Social Networks,” in 2015.
The basic concept is content information on LBSNs with respect to POI properties, user interests, and sentiment indications. Model the three types of information under a unified POI recommendation framework with the consideration of their relationship to check-in actions. The advantage is, user behavior, and demonstrates its power to improve POI recommendation performance on LBSNs. And the disadvantage is contain only small dataset.
5. Quan Yuan, Gao Cong, Aixin Sun, “Graph-based Point-of-interest Recommendation with Geographical and Temporal Influences” in 2014.
Focus on the problem of time-aware POI recommendation, which aims at recommending a list of POIs for a user to visit at a given time. To exploit both geographical and temporal influences in time-aware POI recommendation. Advantage is real world dataset and the disadvantage is taken a more time.
6. Jing Li, XuemingQian, Yuan Yan Tang, Linjun Yang, and Tao Mei,” GPS Estimation for Places of Interest From Social Users’ Uploaded Photos” in 2013.
The basic concept is an unsupervised image GPS location estimation approach with hierarchical global feature clustering and local feature refinement. Consist of two parts: offline system and online system. The advantage is reduced computation time. The disadvantage is in online system data should be not secured.
7. Yang Ji, Chunhong Zhang, ZhihaoZuo, Jing Chang,” Mining User Daily Behavior Based on Location History” in 2012.
The basic concept is to mine user daily behavior based on a user's location history. Time- clustering-based behavior analyses (TCBA) are proposed to model each individual’s location history and mine the regularity in daily activities. The advantage is specified time mentioned. The disadvantage time based analyzing location history.

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8. Huagang Yin, Changhu Wang, Nenghai Yu, Lei Zhang, " Trip Mining and Recommendation from Geo-tagged Photos" in 2012.

A path search system to facilitate tourists' trip planning, not only where to visit but also how to visit. The advantages is time consuming and the disadvanatage is the given path is not given to all cities. Means the information is incomplete.

IV. SYSTEM ARCHITECTURE

PROPOSED SYSTEM ARCHITECTURE

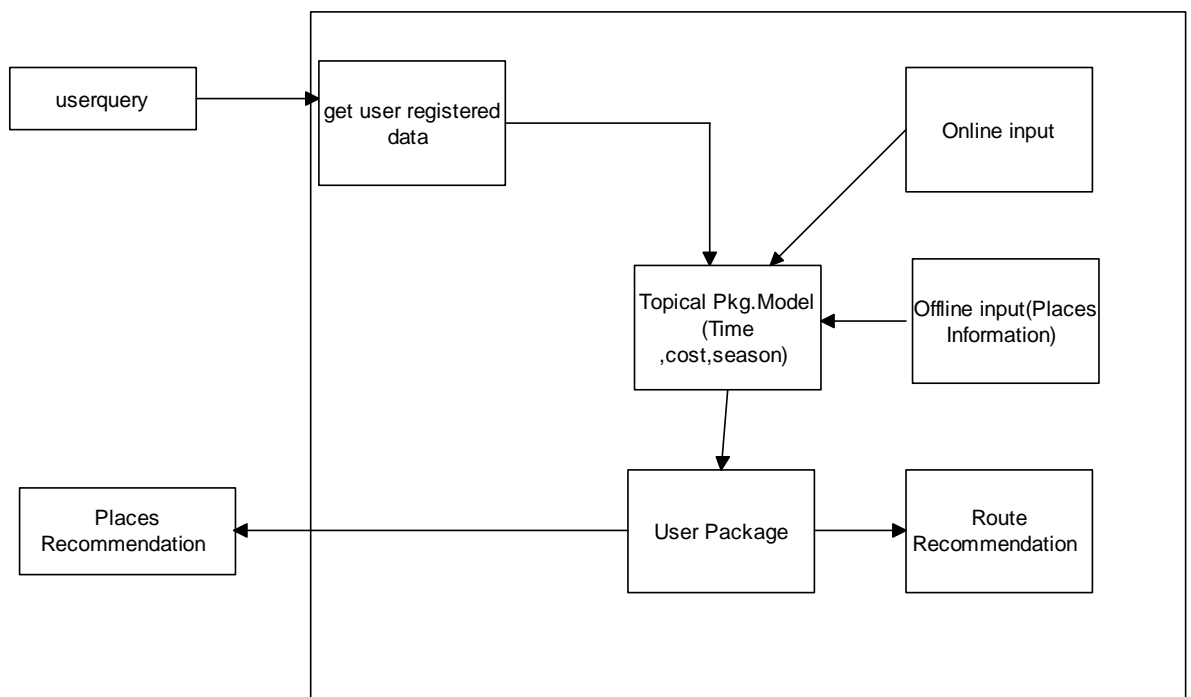


Fig.1: System architecture

SYSTEM OVERVIEW-

Propose system, the system automatically mined user's and routes' travel topical preferences including the topical interest, cost, time and season. Admin add places for each place in city. He can view the user's details as well as each user's interest. User register to the system with its Facebook developer access token that used to get users Facebook data and from that we are mining user's preference by LavenstineDistance Algorithm .User can add travelogs detail and his community contributed photos. Travelogs details are used to get user preferred season for travelling .From dataset travelogs are mined to get time season cost for each place. When user enters the query to search places use get details according to his preference which is get at the time of registration. According to user entered likes his offline preference is updated and again according to that user gets result. User can give rating, comment to each place. User can get optimized package according to his preference of similar user. User can view places recommendation by Rating, Online interest, Preference, activity, Season .He can view his package that contain best season, cost, preference

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package detail. User can view online interests package. User can view places on map. User can view multiple preferences package detail.

ADVANTAGES-

- 1 It recommends places by mining user online point of interest from facebook and show package.
- 2 It also give recommendation using similar user interest and according to that gives recommendation to user.
- 3 It considers other user preference s for places and according to that user get recommendation.

V. MATHEMATICAL MODEL

Let us consider S as a system for automatically recommend places.

$S = \{ \dots \}$

INPUT:

- Identify the inputs

$F = \{f_1, f_2, f_3, \dots, f_n\}$ 'F' as set of functions to execute commands. }

$I = \{i_1, i_2, i_3, \dots\}$ 'I' sets of inputs to the function set }

$O = \{o_1, o_2, o_3, \dots\}$ 'O' Set of outputs from the function sets, }

$S = \{I, F, O\}$

$I = \{ \text{Query submitted by the user, i.e. query} \}$

$O = \{ \text{Output of desired query, i.e. Places recommendation} \}$

$F = \{ \text{Functions implemented to get the output, i.e. Lavenstine Distance Algorithm, POI Mining} \}$

VI. CONCLUSION

We proposed the automatic travel recommendation system by learning the topical package model from big multi source social media. Proposed systems recommend not only point of interest but also travel sequence. User can view places route on map and similar user recommendation. System works on 1) the system automatically mined user's and routes' travel topical preferences including the topical interest, cost, time and season, 2) we recommended not only POIs but also travel sequence, considering both the popularity and user's travel preferences at the same time.

REFERENCES

- 1) H. Liu, T. Mei, J. Luo, H. Li, and S. Li, "Finding perfect rendezvous on the go: accurate mobile visual localization and its applications to routing," in Proceedings of the 20th ACM international conference on Multimedia. ACM, 2012.
- 2) J. Li, X. Qian, Y. Y. Tang, L. Yang, and T. Mei, "Gps estimation for places of interest from social users' uploaded photos," IEEE Transactions on Multimedia, vol. 15, no. 8, 2013.
- 3) S. Jiang, X. Qian, J. Shen, Y. Fu, and T. Mei, "Author topic model based collaborative filtering for personalized poi recommendation," IEEE Transactions on Multimedia, vol. 17, no. 6, 2015.
- 4) J. Sang, T. Mei, and C. Sun, J.T. and Xu, "Probabilistic sequential pois recommendation via check-in data," in Proceedings of ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. ACM, 2012.
- 5) Y. Zheng, L. Zhang, Z. Ma, X. Xie, and W. Ma, "Recommending friends and locations based on individual location history," ACM Transactions on the Web, vol. 5, no. 1, 2011.

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- 6) H. Gao, J. Tang, X. Hu, and H. Liu, "Content-aware point of interest recommendation on location-based social networks," in Proceedings of 29th International Conference on AAAI. AAAI, 2015.
- 7) Q. Yuan, G. Cong, and A. Sun, "Graph-based point-of-interest recommendation with geographical and temporal influences," in Proceedings of the 23rd ACM International Conference on Information and Knowledge Management. ACM, 2014.
- 8) H. Yin, C. Wang, N. Yu, and L. Zhang, "Trip mining and recommendation from geo-tagged photos," in IEEE International Conference on Multimedia and Expo Workshops. IEEE, 2012.
- 9) Y. Gao, J. Tang, R. Hong, Q. Dai, T. Chua, and R. Jain, "W2go: a travel guidance system by automatic landmark ranking," in Proceedings of the international conference on Multimedia. ACM, 2010, pp. 123–132.
- 10) X. Qian, Y. Zhao, and J. Han, "Image location estimation by salient region matching," IEEE Transactions on Image Processing, vol. 24, no. 11, 2015.
- 11) H. Kori, S. Hattori, T. Tezuka, and K. Tanaka, "Automatic generation of multimedia tour guide from local blogs," Advances in Multimedia Modeling, 2006.
- 12) T. Kurashima, T. Tezuka, and K. Tanaka, "Mining and visualizing local experiences from blog entries," in Database and Expert Systems Applications. Springer, 2006.
- 13) Y. Shi, P. Serdyukov, A. Hanjalic, and M. Larson, "Personalized landmark recommendation based on geo-tags from photo sharing sites," ICWSM, vol. 11, 2011.
- 14) M. Clements, P. Serdyukov, A. de Vries, and M. Reinders, "Personalised travel recommendation based on location co-occurrence," arXiv preprint arXiv, 2011.
- 15) X. Lu, C. Wang, J. Yang, Y. Pang, and L. Zhang, "Photo2trip: generating travel routes from geo-tagged photos for trip planning," international conference on Multimedia. ACM, 2010.