

# Surve on “ Travel Recommendation Using POI of User”

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## ABSTRACT

Big data increasingly benefit both research and industrial area such as health care, finance service and commercial recommendation. This paper presents a personalized travel sequence recommendation from both travelogues and community-contributed photos and the heterogeneous metadata (e.g., tags, geo-location, and date taken) associated with these photos. Unlike most existing travel recommendation approaches, our approach is not only personalized to user's travel interest but also able to recommend a travel sequence rather than individual Points of Interest (POIs). Topical package space including representative tags, the distributions of cost, visiting time and visiting season of each topic, is mined to bridge the vocabulary gap between user travel preference and travel routes. We take advantage of the complementary of two kinds of social media: travelogue and community-contributed photos. We map both user's and routes' textual descriptions to the topical package space to get user topical package model and route topical package model (i.e., topical interest, cost, time and season). To recommend personalized POI sequence, first, famous routes are ranked according to the similarity between user package and route package. Then top ranked routes are further optimized by social similar users' travel records. Representative images with viewpoint and seasonal diversity of POIs are shown to offer a more comprehensive impression. We evaluate our recommendation system on a collection of 7 million Flickr images uploaded by 7,387 users and 24,008 travelogues covering 864 travel POIs in 9 famous cities, and show its effectiveness. We also contribute a new dataset with more than 200K photos with heterogeneous metadata in 9 famous cities.

**Keyword :** - Travel recommendation, Geo-tagged photos, social media, multimedia information retrieval, POI(Point of Interest), GPS, Collaborative Filtering (CF), Location-based

## 1. INTRODUCTION

Automatic travel recommendation is an important problem in both research and industry. Big media, especially the flourish of social media (e.g., Facebook, Flickr, Twitter etc.) offers great opportunities to address many challenging problems, for instance, GPS estimation [1], [2] and travel recommendation [3]. Travelogue websites (e.g., www.igougo.com) offer rich descriptions about landmarks and traveling experience written by users. Furthermore, community-contributed photos with metadata (e.g., tags, date taken, latitude etc.) on social media record users' daily life and travel experience. These data are not only useful for reliable POIs (points of interest) mining [4], travel routes mining, but give an opportunity to recommend personalized travel POIs and routes based on user's interest. based on user's interest. There are two main challenges for automatic travel recommendation. First, the recommended POIs should be personalized to user interest since different users may prefer different types of POIs. Take New York City as an example. Some people may prefer cultural places like the Metropolitan Museum, while others may prefer the cityscape like the Central Park. Besides travel topical interest, other attributes including consumption capability (i.e., luxury, economy), preferred visiting season (i.e., summer, autumn) and preferred visiting time (i.e., morning, night) may also be helpful to provide personalized travel recommendation. Second, it is important to recommend a sequential travel route (i.e.,

a sequence of POIs) rather than individual POI. It is far more difficult and time consuming for users to plan travel sequence than individual POIs.

## 2. LITERATURE SURVEY:

### 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, pp. 918. Location-based services (LBS) are becoming ubiquitous. People are using their mobile phones to enjoy the many LBS applications on the move. For example, 18% of U.S. smart phone users accessed at least one LBS application per day. One of the fundamental problems in these applications is localization. How to automatically obtain the accurate location context of mobile users still remains.

### 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, pp. 2058-2071, 2013. With the development of communication technology, more and more digital devices, such as cameras and smart-phones, offer global positioning system (GPS) integration. Large quantities of images taken by users are shared on social media websites such as Facebook and Flickr every day. To make it more convenient to administrate resources of images, some additional information such as the times and GPS locations where they were taken should be provided.

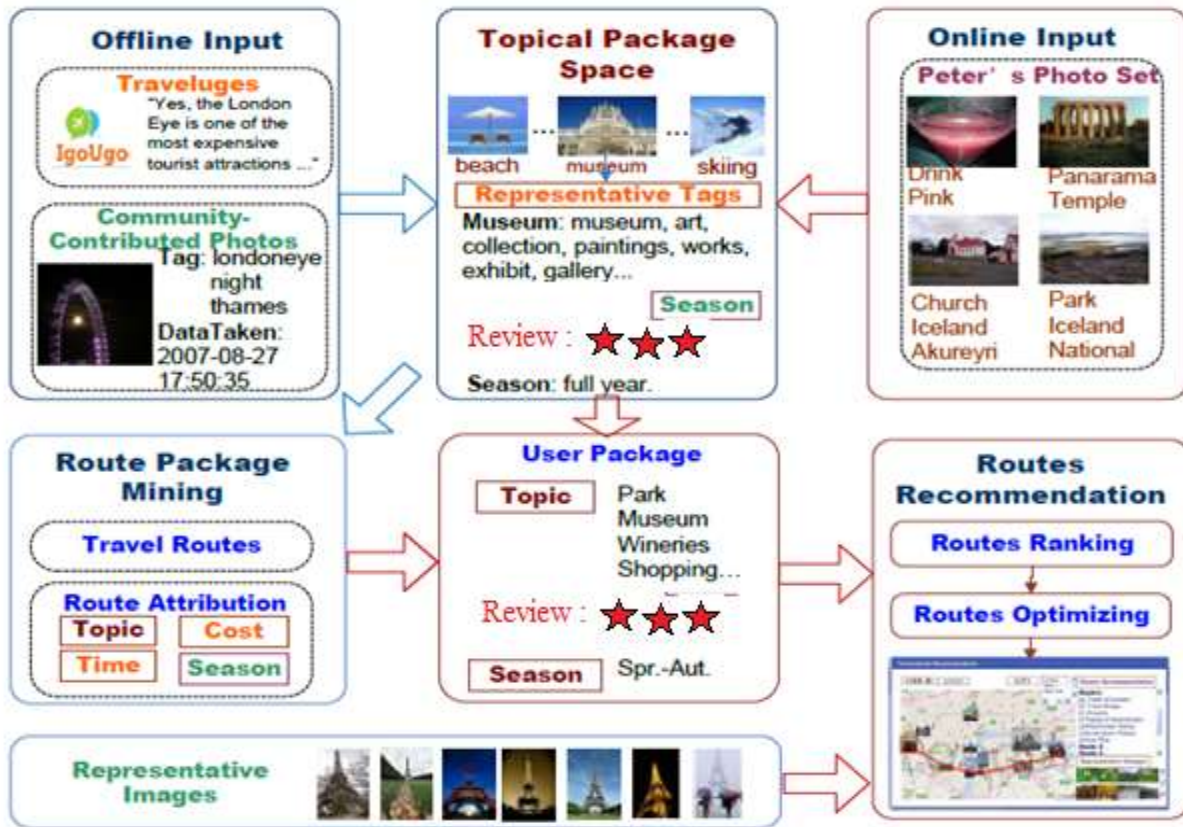
## 3. OBJECTIVES:

To find out POIs we are going to use photographs that users upload on Social Media which includes information such as naming tags, geo-location tags etc.

## 4. PROBLEM STATEMENT:

The data is then divided into clusters by using a clustering algorithm which will divide the data according to the class it will belong. Clusters will be of crime, politics, religious and so on. The monitoring/keyword filtering is done on the cluster so that only that data will be left which contains the words related to the riots or civil unrest.

**5. SYSTEM ARCHITECTURE:**



**5.1 Existing System:-**

Routes' travel topical preferences including the topical interest, cost, time and season. The system manually search user's.

**5.2 Proposed System:-**

It can work into the all cities. Reference to the trip adviser site this an current working state . Display the which monsoon is good better . Star rate provide Add the images and upload the image in social site.

**6. ALGORITHM:**

- Input: A set O with its arbitrary skyline point  $O:p_0$ ;
- Output: Skyline representatives R.
- 1: Initialize priority queue R;
- 2: Initialize L to contain the root entries of the R-tree and compute Scon of O;
- 3: while L is not empty do
- 4: E the entry in L with the largest max-rep-dist;
- 5: if E is not dominated by any point in Scon then
- 6: E' = the entry with the minimum L1-distance to the origin whose min-corners dominate that of E;
- 7: if E' exists then

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8: access the child node C of E';
9: for each entry e in C do
10: if  $e \in O$  and e is not dominated by any point in
Scon then
11: insert e in L;
12: else
13: if E is a point p then
14: add p to R;
15: else
16: access the child node C of E;
17: for each entry e in C do
18: if  $e \in O$  and e is not dominated by any
point in Scon then
19: insert e in L;
20: return R.

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### 6.1 Advantages:-

Routes' travel topical preferences including the topical interest, cost, time and season. The system manually search user's.

### 6.2 Disadvantages:-

The major disadvantage that work only 9 cities.Existing system that reference in Travelogue websites (e.g. [www.igougo.com](http://www.igougo.com)) current it can not working state.Large time required for find the shortest path.

## 7. CONCLUSION:-

This personalized travel sequence recommendation system gives topical package model from big multi-source social media: travelogues and community-contributed photos. The advantages of this work are 1) the system automatically mined users and routes travel topical preferences including the topical interest, cost, time and season, 2) system recommended not only POIs but also travel sequence, considering both the popularity and users travel preferences at the same time. System mined and ranked famous routes based on the similarity between user package and route package.

And then optimized the top ranked famous routes according to social similar users travel records. However, there are still some limitations of the current system.

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## 9. 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, pp. 9–18.
- [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, pp. 2058–2071, 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, pp. 907–918, 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, p. 5, 2011.
- [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, pp. 659–668.
- [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, pp. 540–545.
- [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, pp. 4348–4358, 2015.
- [11] H. Kori, S. Hattori, T. Tezuka, and K. Tanaka, "Automatic generation of multimedia tour guide from local blogs," Advances in Multimedia Modeling, pp. 690–699, 2006.