

Individualized Travel Recommendation by Mining People Ascribes and Travel Logs Types from Community Imparted Pictures

S.Saranya^{#1}, S.Sivaranjani^{#2}, G.Surya^{#3}, A.Ramachandran^{*4}

^{#1, #2, #3} Student of Information Technology

^{*4} Assistant Professor of Information Technology

SKP Engineering College, Tiruvannamalai-606611, Tamilnadu

Abstract- Leveraging community imparted data for personalized recommendation is one of the active research problems since there are rich contexts and human activities in such explosively growing data. We focus on personalized travel recommendation and show promising applications. We conduct personalized travel recommendation by considering specific user profiles or attributes. We propose a personalized travel recommendation model considering users' attributes as well as their group types and the knowledge mined from travel logs. We investigate the association of people attributes such as time, popular landmarks, etc., We also recommend the nearby location suggestions in mobile using android.

Keyword – data, travel recommendation, location suggestions.

I. INTRODUCTION

With the prosperity of social media and the success of many photo-sharing websites, like Flickr and Picasa, the volume of community-contributed photos has increased drastically. Such large-scale user-contributed photos contain rich metadata such as tags, time, and Geo-locations (or Geo-tags), etc. These overwhelming amounts of context data, though noisy, are tremendously useful for many multimedia applications including annotation, searching, advertising and recommendation. Travel recommendation is especially attractive to many researchers because of the importance and the intrinsic relationship with people's everyday lives. For the generic recommendation, it contains the suggested travel information the destination given by the user when he/she is planning a trip; Millions of human sensors capture different aspects of the spatial-temporal information. In order to mine the travel Knowledge automatically, a focus of recent interest is the use of user-contributed resources, including the textual travelogues (i.e., blogs or logs) and photos taken during trips. Through the photos gathered from various communities, such rich person's attributes and travel group types can be automatically detected and provide other important aspects in terms of travel demographics. Rather than the plain travel frequencies from or to certain locations, we can further investigate the demographic distributions in these trips via the statistics of detecting people attributes and group types. For the sparseness issues, some travel landmarks may lack rich historical travel photos for analysis; therefore, the statistics are less reliable. To deal with this problem, we utilize smoothing methods to relieve the deficiency; for example, considering travel location, popularity in the whole city for background smoothing we

are conducting experiments on more people attributes and adjust the probabilistic model for such diverse attributes to address more capabilities in personalization. Besides, the more competitive recommendation models need to be investigated as well. We also want to expand our model with more contexts such as travel durations, traveling seasons.

We believe such location- and individual-aware models are promising for further applications such as advertisement. To our best knowledge, this is the first research work that uses the additional contexts in the photo, i.e., people attribute and travel group types, to support the personalized recommendation framework. We leverage these automatically detected people attributes in the large-scale photos for social media mining and uncover the differences in travel behaviors across demographics.

- We propose to predict the travel group type of a photo stream by using the person's attributes and social contexts shown in these photos.
- We propose a probabilistic personalized travel recommendation model considering users' attributes as well as their group types and the knowledge mined from travel logs. Such scheme is promising to apply in a mobile environment.
- We conduct the experiments on 19 major cities in the world and show that using people attributes a travel group type have the potential to improve the personalized travel recommendation, especially in the location where people have diverse choices of the next stops.
- We investigate the association of a person's attributes and more contexts (e.g., time, popular landmarks) and show the benefits for profiling human activities.

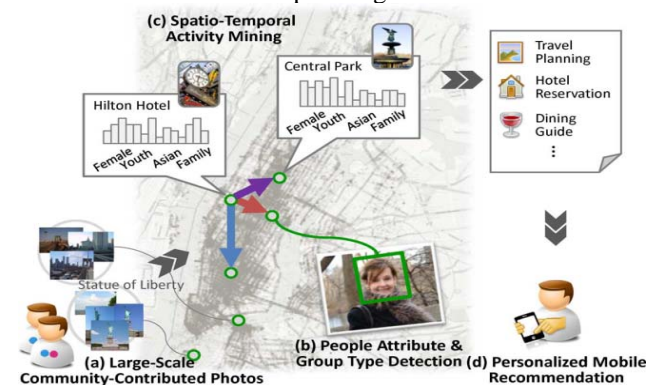


Fig 2: The sampled attribute-oriented travel movements in our data set in Manhattan. In this example, the width of an arrow denotes the travel frequency between the two locations originating from Rockefeller Center. The color regions are proportional to the percentages of genders—male (blue) and female (red). Through the minded knowledge (e.g., the popular landmarks, the distribution of attributes associated a travel route), we can suggest the best route for travelers according to their attribute profile.

V. MODULES

There are three modules are available in this project they are Social Networking Profile Creation, Travel recommendation site creation, Personalized Mobile recommendation.

a) **Social Networking Profile Processing:**

In our first module we are creating a social networking profile that is specifically concentrated on users pictures. Users will upload their pictures in to the social networking site. Users are willing to share photos for the purpose of organization and (social) communication – especially for travel photos. Meanwhile, such photos can be treated as the *social pixels* by travelers’ cameras among travel locations. It is convincing to gather demographics by detecting important people attributes from such freely available user-contributed photos.

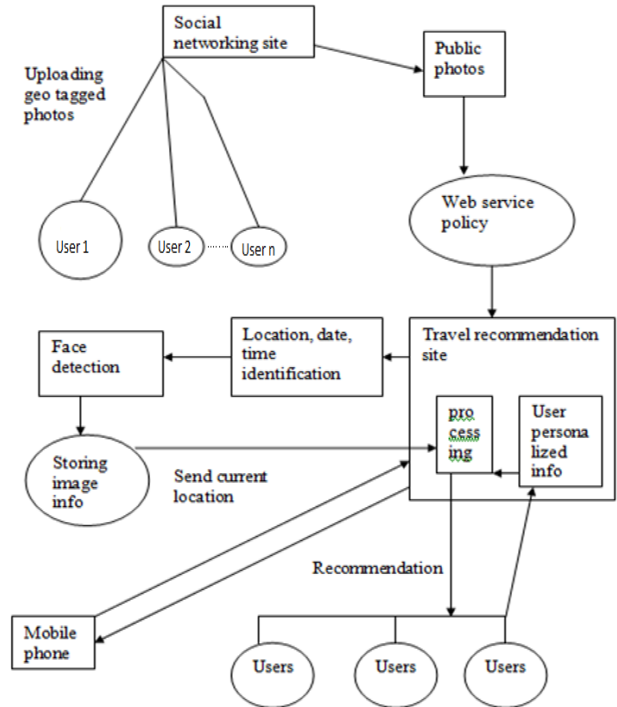
b) **Travel Recommendation Site Creation And Processing**

In our second module we are creating a travel recommendation site . And the public pictures uploaded from the social networking profile is taken by the travel recommendation site and process the images for getting the information that are tagged in them. Using Geo-tagged and time-stamped photos from social media as a resource for travel information mining have demonstrated many promising results. The large amount of photo trajectories not only reveals the users’ travel movements, but is also promising for mining the demographic information about the locations by detecting people attributes of the faces in the photos. Promising results of facial attribute detection, which has reached reasonable accuracy for further applications. Therefore, we propose an approach to enable personalized travel recommendation by directly and automatically mining the parameterize factors from the community-contributed photos— especially emphasizing the (automatically) detected people attributes from the photos

c) **Personalized Model Recommendation:**

In this work, we utilize people attributes of the travel preference of users. Therefore, we construct a mid-level feature bank based on those facial components for providing better generalization capability to deal with various facial attributes. From the images extracted from social reworking profile, and by considering particular user profile we will recommend travel destinations for the user. Probabilistic personalized travel recommendation model

which exploits the automatically mined knowledge of the travel photo logs as well as the detected person attributes and travel group types in photo contents. By information-theoretic measures and experiments we confirm that person’s attributes are effective for mining demographics for travel landmarks and paths, and thus greatly benefiting personalized travel recommendation. The nearby location suggestion in mobile also implemented in this module



System architecture

VI. CONCLUSIONS

In this work, we propose a probabilistic personalized travel recommendation model which exploits the automatically mined knowledge of the travel photo logs as well as the detected people attributes and travel group types in photo contents. By information-theoretic measures and experiments with more than 10 million photos from 19 major cities, we confirm that people attributes are effective for mining demographics for travel landmarks and paths, and thus greatly benefiting personalized travel recommendation. Meanwhile, people attributes are orthogonal to the travel logs alone and can further yield more satisfactory results especially in more challenging recommendations. Moreover, we propose to exploit social contexts in travel photo streams predicting their travel group types. The experiments demonstrate that travel group type prediction can substantially improve group recommendations by mining travel preferences of different group types.