PRO-BUDDY

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Abstract: There are few Existing social networking sites like Facebook, Google+ etc. recommend friends based on their tastes and social graph which is not user preferences for selecting friends. In this paper, we present a life style basically based on friend recommendation system for social networks that recommends friends to users supporting their life designs rather than social graphs also using GPS, Expertise and profile based. By using sensor-rich smartphones, In this pedometer is used to detect the lifestyle. In addition measures the similarity of life styles between users, and recommends friends to users if their life styles have high similarity. we tend to model a user's manner as life documents; from that his/her life designs area unit are extracted by exploitation the Latent Dirichlet Allocation formula..
Keywords: Data Mining, Friend Recommendation, Sensors, Android, Smartphones, Machine Learning, Lifestyle.

I. INTRODUCTION

The development of social networks from the Internet generated a major improvement in information spread. From data to search and from search to social interaction, users around the world are now more deeply involved with the Internet as user generated content undergoes perpetual growth and expansion. Through adoption of social networks, user generated content is far more accessible than before. A powerful aspect of social networks is the customization of user experiences. Recommendation systems constitute a large role in providing quality customized user experiences. The main challenge in developing relevant friend recommendations is due to the dynamic nature of humans' perception of friendship, which constitutes a cause for heterogeneity in social networks [1], [2]. It is usual and frequent for humans to change their view of friendship. Further, this view varies from person to person in which a social network can undergo frequent and abrupt change over time even without the introduction of new nodes [3].Recommender systems help users to identify their interests and sets of choices by predicting the usefulness degree of an item or group of items to these users. They are defined as a special type of information filtering that gives information about which items might be interesting to users.

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In Existing social Network recommendations based on Social graph which is used to recommended a friends such as profile based, mutual friends,etc . It is not possible for appropriate friend selection in real life. Online social networks have become important hubs of social activity and conduits of information. Popular social net- working sites such as FaceBook, the social news aggregator Digg, and the microblogging service Twitter have undergone explosive growth. Though FaceBook has approach of recommending

friend which is based on mutual friend that makes use of friend of friend approach found to be not that appropriate. In the existing system, many recommending systems have their own proposed framework for assigning ranks to the user activities and having various personalized recommendation. Such as Netflix for movie recommendation, Foursquare for recommending places, FaceBook for recommending friend based on mutual friends. In which recommending friend based on mutual friends is not that appropriate, these are the various disadvantages that motivated us to propose new system. In this paper we considered FaceBook for extracting the user details such as name, interest, email id etc. and we have analyzed its structure. From our study perspective one of the important functions of this network is user interest. User interest is the process by which thoughts and actions of individual are generated and depicted in their profile and can analyze on it to identify his/her life style. This can be widely accepted in social networks. Hence, the paper aims at fulfilling the development of the following system: Considering, FaceBook profile data, we calculate probabilities of the topics in the user document using LDA model that is considering the probabilistic method to find dominant life style vector and then recommending to the query user with potential friend whose values are greater than certain specified threshold value.

III. DISADVANTAGES OF EXISTING SYSTEM

Existing social networking services recommend friends to users based on their social graphs, which may not be the most appropriate to reflect a user's preferences on friend selection in real life.

IV. PROPOSED SYSTEM

A novel semantic-based friend recommendation system for social networks, which recommends friends to users based on their life styles instead of social graphs. By taking advantage of sensor-rich smartphones, Pro-Buddy discovers life styles of users from user-centric sensor data, measures the similarity of life styles between users, and recommends friends to users if their life styles have high similarity. We model a user's daily life as life documents, from which his/her life styles are extracted by using the Latent Dirichlet Allocation algorithm. Similarity metric to measure the similarity of life styles between users, and calculate users' Impact in terms of life styles with a friend-matching graph. We integrate a linear feedback mechanism that exploits the user's feedback to improve recommendation accuracy.

V. ADVANTAGES OF PROPOSED SYSTEM

Recommended potential friends to users if they share similar life styles. The feedback mechanism allows us to measure the satisfaction of users, by providing a user interface that allows the user to rate the friend list.

VI.   CONCLUSION

In this paper, we presented the design and implementation of Pro-Buddy, a semantic-based friend recommendation system for social networks. Different from the friend recommendation mechanisms relying on social graphs in existing social networking services, Pro-Buddy extracted life styles from user-centric data collected from sensors on the smartphone and recommended potential friends to users if they share similar life styles. We implemented Pro-Buddy on the Android-based smartphones, and evaluated its performance on both smallscale experiments and large-scale simulations. The results showed that the recommendations accurately reflect the preferences of users in choosing friends.Beyond the current prototype, the future work can be four-fold. First, we would like to evaluate our system on large-scale field experiments. Second, we intend to implement the life style extraction using LDA and the iterative matrix-vector multiplication method in user impact ranking incrementally, so that Pro-Buddy would be scalable to large-scale systems.

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