



FIND BEST FRIEND: BIG DATA IMPLEMENTATION OF BEST FRIEND RECOMMENDATION SYSTEM

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ABSTRACT-In the EXISTING SYSTEM, most of them rely on pre-existing relationships to pick friend candidates. Identification of same Mind Set Friends in social network is a challenging task. In the PROPOSED SYSTEM, Every User's Interest Mobility Pattern and Likes are monitored and collective Score is calculated. Best Friends are identified based on these Values. Finally, we develop Face book like Webpage for further Optimization of Recommendation of Friends. In the MODIFICATION PROCESS, server will act as intermediate layer in order to monitor user's behaviour. Both the user personal information like name, phone number, email id and photos will not be shared among themselves for the initial period of time. So server will monitor user behaviour consistency. If server finds misbehaviour in any time, user will be removed from the server.

Keywords: cloud computing, big data

INTRODUCTION:

TWENTY years ago, people typically made friends with others who live or work close to themselves, such as neighbours or colleagues. We call friends made through this traditional fashion as G-friends, which stands for geographical location-based friends because they are influenced by the geographical distances between each other. With the rapid advances in social networks, services such as Face book, Twitter and Google+ have provided us revolutionary ways of making friends. According to Face book statistics, a user has an average of 130 friends, perhaps larger than any other time in history. One challenge with existing social networking services is how to recommend a good friend to a user. Most of them rely on pre-existing user relationships to pick friend candidates. Friend book can help mobile phone users find friends either among strangers or within

a certain group as long as they share similar life styles. In our everyday lives, we may have hundreds of activities, which form meaningful sequences that shape our lives. In this paper, we use the word activity to specifically refer to the actions

taken in the order of seconds, such as "sitting", "walking", or "typing", while we use the phrase life style to refer to higher-level abstractions of daily lives, such as "office work" or "shopping". For instance, the "shopping" life style mostly consists of the "walking" activity, but may also contain the "standing" or the "sitting" activities. To model daily lives properly, we draw an analogy between people's daily lives and documents, as shown in Fig. 1. Previous research on probabilistic topic models in text mining has treated documents as mixtures of topics, and topics as mixtures of words. Inspired by this, similarly, we can treat our daily lives (or life documents) as a mixture of life styles (or topics), and each life style as a mixture of activities (or words). Observe here, essentially, we represent daily lives with "life documents", whose semantic meanings are reflected through their topics, which are life styles in our study. Just like words serve as the basis of documents, people's activities naturally serve as the primitive vocabulary of these life documents. Our proposed solution is also motivated by the recent advances in smart phones, which have become more and more popular in people's lives. These smart phones (e.g., iPhone or Android-based smart phones) are equipped with a rich set of embedded sensors, such as GPS, accelerometer, microphone, gyroscope, and camera. Thus, a smart phone is no longer simply a communication device, but also a powerful and environmental reality sensing platform from which we can extract rich context and content-aware information. From this perspective, smart phones serve as the ideal platform for sensing daily routines from which



people's life styles could be discovered. In spite of the powerful sensing capabilities of smart phones, there are still multiple challenges for extracting users' life styles and recommending potential friends based on their similarities. First, how to automatically and accurately discover life styles from noisy and heterogeneous sensor data? Second, how to measure the similarity of users in terms of life styles? Third, who should be recommended to the user among all the friend candidates? To address these challenges, in this paper, we present Friend book, a semantic-based friend recommendation system based on sensor-rich smart phones. The contributions of this work are summarized as follows: To the best of our knowledge, Friend book is the first friend recommendation system exploiting a user's life style information discovered from smartphone sensors. Inspired by achievements in the field of text mining, we model the daily lives of users as life documents and use the probabilistic topic model to extract life style information of users. We propose a unique similarity metric to characterize the similarity of users in terms of life styles and then construct a friend-matching graph to recommend friends to users based on their life styles. We integrate a linear feedback mechanism that exploits the user's feedback to improve recommendation accuracy.

EXISTING SYSTEM:

In the **EXISTING SYSTEM**, most of them rely on pre-existing relationships to pick friend candidates. So how to recommend the good friend in social network is a challenging task.

DISADVANTAGES:

- ☐ Unreliable
- ☐ Less security
- ☐ Less effective

PROPOSED SYSTEM:

In the **PROPOSED SYSTEM**, based on receiving a request, server returns a list of people with highest recommendation scores to the query user based on matching habits or life style, attitudes, tastes, moral standards, economic level and people they already know. Finally, server integrates a feedback mechanism to further improve the recommendation accuracy.

MODIFICATION PROCESS:

In the **MODIFICATION PROCESS**, server will

act as intermediate layer in order to monitor user's

behaviour. Both the user personal information like name, phone number, email id and photos will not be shared among themselves for the initial period of time. So server will monitor user behaviour consistency. If server finds misbehaviour in any time, user will be removed from the server.

ADVANTAGES:

- ☐ Reliable
- ☐ High security
- ☐ More effective

ALGORITHM / METHODOLOGY:

STEMMING ALGORITHM

STEP 1: Extracting keyword.

STEP 2: Assigning values.

```
public static final String WEB_TITLES = "Friend Book";
public static final String[] USER_LIKES = {"BOOKS", "MUSIC", "POLITICS", "MEDIA", "FASHION", "ART", "GADGETS"};
public static final String[] FRIEND_STATUS = {"BLOCKED", "WAITING", "APPROVED"};
public static final String SESSION_USER_OBJ = "USER_OBJ";
public static final String APP_KEY = "cztrjbaqfbswcj0";
public static final String APP_SECRET = "s7pafzdav591139";
public static final String USER_LIST_FILE_LOC = "D:\\temp\\userlist.json";
public static final String DROPBOX_LOC = "USERDTLS";
public static final String[] VULGAR_WORDS = {"bastard", "rascal", "muttal", "porukki", "shit"};
```

SYSTEM SPECIFICATION

Hardware Requirements

Processor	:	Core i3/i5/i7
RAM	:	2-4GB
HDD	:	500 GB

Bluetooth

Software Requirements

Platform	:	Windows Xp/7/8
Front End	:	Java-JDK1.7, Android-sdk and Eclipse, Apache tomcat
Back End	:	MySQL
Big Data	:	Apache Hadoop -2.5.1



ARCHITECTURE DIAGRAM:



MODULES

1. APPLICATION CREATION
2. SERVER
3. EXTRACTING THE KEYWORD USING PARTICLE FILTER
4. AUTOMATIC ALERT TO ABUSIVE WORD
5. ANDROID DEVELOPMENT

DFD FOR KBMFRIEND



1. ANDROID DEVELOPMENT

Mobile Client is an Android application which created and installed in the User's Android Mobile Phone. So that we can perform the activities. The Application First Page Consist of the User

registration Process. We'll create the User Login Page by Button and Text Field Class in the Android. While creating the Android Application, we have to design the page by dragging the tools like Button, Text field, and Radio Button. Once we designed the page we have to write the codes for each. Once we create the full mobile application, it will generated as Android Platform Kit (APK) file. This APK file will be installed in the User's Mobile Phone an Application. Using this APK user will be registering with the server by providing Alternative mobile number & Email ID. User's IMSI number is also captured by the server.

2. APPLICATION CREATION:

In this module we will create an application to tweet with our friends. For creating an Application, we will be using Advanced Java Concepts like JSP and Servlets. While creating the application, we'll assign the design fields like Username, Password, Phone and other information. Once the created the user is allowed to enter the data. Also the server will store the data and allow the user to enter in to the chat application. The User will enter the tweets through this application.

3. SERVER:

Server is used to verify the user information and allow the User to Tweet with their friends. Also the Server will analyze the contents user. So that we the server will extract the Keywords. Also the Server will be retrieving the user information like Access time and location which is used to find the User's location and we can provide the any necessary help to them.

4. EXTRACTING THE KEYWORD

USING PARTICLE FILTER:

The Server will analyze the Tweets between the Users and the extract the Keywords using Particle Filter. The Particle Filter will the extracts the Keywords and filter the other words using the Stemming Algorithm. By using the Stemming algorithm we can filter the unwanted words in the chat so that we can calculate the extracted words counts. So that we will generate an automatic alert to the message which has abusive words.

5. AUTOMATIC ALERT TO ABUSIVE WORD:



In this module both the image and word are analyzed and based on the content we detect whether the words contains abusive meaning and make an alert to the user so that he can close the message without seeing. this make the children to make aware of abusive message.

CONCLUSION:

In this paper, we presented the design and implementation of Friend book, a semantic-based friend recommendation system for social networks. Different from the friend recommendation mechanisms relying on social graphs in existing social networking services, Friend book 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 Friend book on the Android-based smart phones, and evaluated its performance on both small-scale experiments and large-scale simulations. The results showed that there commendations accurately reflect the preferences of users in choosing friends.

FUTURE ENHANCEMENT:

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 Friend book would be scalable to large-scale systems. Third, the similarity threshold used for the friend-matching graph is fixed in our current prototype of Friend book. It would be interesting to explore the adaption of the threshold for each edge and see whether it can better represent the similarity relationship on the friend matching graph.

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