

**A FRIENDS SUGGESTION SYSTEM FOR DEVELOPING A USER'S LIFE  
STYLE INFORMATION****Yarra Yagna Lakshmi<sup>1</sup>, J.Lakshmi<sup>2</sup>**

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**ABSTRACT:**

Even though huge efforts were made for activity recognition by means of smart phones, there is comparatively minute work on detection of daily routines by means of smart phones. To deal with the challenges of existing works, we provide Friend book, which is a semantic-based system of friend recommendation for social networks on the basis of sensor-rich smart phones. In recent times, with the progression of systems of social networking, friend recommendations have gained a lot of consideration. It is the friend recommendation system which was measured first using life style information of user that was discovered from Smartphone sensors. Different from friend recommendation methods depending on social graphs in traditional services of social networking, Friend book mined life styles from user-centric data gathered from sensors on smart phone and suggested potential friends towards users if they distribute comparable life styles. Introduced system finds out life styles concerning users from user centric information, and assesses resemblance of life styles among users and in this system, client-server mode was implemented where every client is a Smartphone that is approved by user and servers are data centres.

***Keywords: Social networking, Smart phones, Friend book, Sensors, Data centres.***

## 1. INTRODUCTION:

One of the challenges faced by existing services of social networking is recommending a good friend towards a user. For the most of them depend on pre-existing user relationships to select friend candidates [1]. Earlier research on models of probabilistic topic in text mining has considered documents as combination of topics, and topics as combination of words. With fast progression in social networks, these services have offered us revolutionary means of making friends. Our daily lives are considered as a combination of life styles and each life style as a combination of activities. Smart phones function as ideal platform for sensing every day routines from which people's life styles might be discovered. Regardless of commanding sensing ability of smart phones, there exist numerous challenges for extraction of users' life styles and recommending possible friends on the basis of their similarities. To deal with the challenges of existing works, we provide Friend book, which is a semantic-based system of friend recommendation for social networks on the basis of sensor-rich smart phones. The system assists users of mobile phone to discover friends within an assured group so

long as they distribute comparable life styles and recommends friends to users on the basis of their life styles rather than social graphs. By benefitting from sensor-rich smart phones, the introduced system finds out life styles concerning users from user centric information, and assesses similarity of life styles among users, and suggests friends to users if their life styles contain high similarity [2]. Friend book is the system of friend recommendation which was considered first using life style information of user that was discovered from smart phone sensors.

## 2. METHODOLOGY:

Existing systems of friend recommendation, on the other hand, are considerably different from our introduced work, as we use modern sociology findings to suggest friends based on their comparable life styles. In recent times, recommendation systems that attempt to suggest items to users have turn out to be more and more accepted. Traditional systems of friend recommendation within social networking systems, recommend friends towards users if, in accordance with their social associations, they distribute to common friends. In recent times, with the progression of systems of social networking,

friend recommendations have gained a lot of consideration [3]. Activity recognition function as source for extraction of high-level daily routines from low-level sensor information, that was extensively considered using a variety of types of wearable sensors. The progression of smart phones allows activity recognition by means of rich set of sensors on smart phones. Even though huge efforts were made for activity recognition by means of smart phones, there is comparatively minute work on detection of daily routines by means of smart phones. In our work, we make available Friend book, which is a semantic-based system of friend recommendation for social networks on the basis of sensor-rich smart phones. System detects life styles concerning users from user-centric sensor information, and assesses similarity of life styles among users, and suggests friends to users if their life styles contain high comparison. Contrasting from the mechanisms of friend recommendation depending on social graphs in traditional services of social networking, Friend book mined life styles from user-centric data gathered from sensors on smart phone and suggested potential friends towards users if they distribute comparable life styles. Life styles as well as activities are considerations

of daily lives at different levels where daily lives are treated as a combination of life styles and lifestyles as a combination of activities. This is corresponding to the consideration of documents as assembly of topics and topics as group of words. By benefitting from recent expansions in text mining, we daily lives of users were modelled as life documents, life styles as topics, and activities as words. Life styles are typically reflected as a combination of motion activities with altered occurrence probability [4]. Usually there are two major approaches such as supervised learning as well as unsupervised learning. For these methods, established techniques were developed. The number of activities that are involved in analysis is irregular and it is tricky to gather a huge set of ground precision data for every activity, which formulate supervised learning algorithms inappropriate for our system. Hence unsupervised learning approaches were used to make out activities. An overview of activity recognition was shown in fig1. To advance recognition accuracy, features are mined to distinguish data after pre-processing.

### 3: AN OVERVIEW OF PROPOSED SYSTEM:

On client side, every smart phone can trace data of its user, and carry out instantaneous activity recognition and notify generated life documents towards servers. Conventional friend recommendation systems were in general different from our introduced work, as we use modern sociology findings to suggest friends based on their comparable life styles. In the overview of Friend book system client-server mode was adopted where every client is a smart phone carried by a user and servers are data centres. In established services of social networking, contrasting from the mechanisms of friend recommendation depending on social graphs, friend book mined life styles from user-centric data gathered from sensors on smart phone and suggested potential friends towards users if they distribute comparable life styles. It is worth noting that collection of offline data as well as training phase is essential to build suitable activity classifier for instantaneous activity recognition on smart phones. On server side, seven modules are intended to execute task of friend recommendation [5]. The module of data collection gathers life documents from users' smart phones. The life styles

concerning users are mined by analysis module of life style with representation of probabilistic topic. Module of life style indexing positions life styles of users into database. A friend-matching graph is build consequently by friend-matching module of graph construction to symbolize similarity relationship among users' life style. The module of user query considers a user's query and forwards a ranked list of possible friends to user as reply [6]. The system moreover permits users to provide feedback of recommendation results which are processed by module of feedback control. With this element, the accurateness of friend recommendation is enhanced.

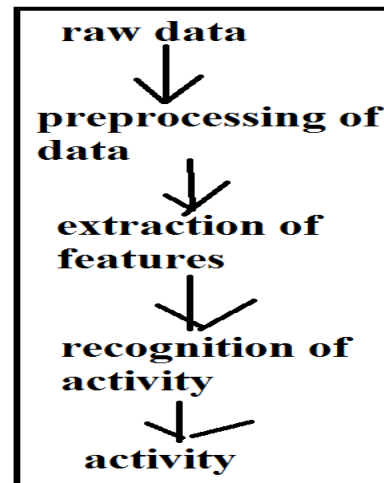


Fig1: An overview of activity recognition.

### 4. CONCLUSION:

We introduce Friend book, which is a semantic-based system of friend

recommendation for social networks on the basis of sensor-rich smart phones for dealing with the challenges of existing works. Smart phones serve as perfect proposal for sensing daily habitual from which people life styles might be discovered. From our introduced work, existing systems of friend recommendation, on the other hand, are considerably different as we use modern sociology findings to suggest friends based on their comparable life styles. Conventional friend recommendations in social networking systems, suggest friends towards users if, in relation to their social relations, they distribute to common friends. The introduced approach assists users of mobile phone to discover friends within an assured group so long as they distribute comparable life styles and recommends friends to users on the basis of their life styles rather than social graphs. It finds out life styles concerning users from user centric information by benefitting from sensor-rich smart phones, and assesses similarity of life styles among users, and suggests friends to users if their life styles contain high resemblance. Proposed system is the friend recommendation method which was considered first using life style information of user that was discovered from

Smartphone sensors. The system allows users to offer feedback of recommendation results which are processed by module of feedback control and by this element, accuracy of friend recommendation is enhanced.

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