

## **User Vitality Ranking and Prediction in Social Networking Services: a Dynamic Network Perspective**

### **Abstract:**

Social networking service has been prevalent at many online platforms. The social networking service facilitates the building of social networks or social relations among users who, for instance, share interest, activities, and background and physical connections. Through such service, users could stay connected with each other and be informed of friends' behaviors such as posting at a platform, and consequently be influenced by each other. For instance, in today's Twitter and Weibo (one of the most popular social networking sites in China), a user can get the instant updates about his connected friends' postings and could further retweet or comment the postings. Within a time period, millions of users may take different actions such as posting and retweeting at these social networking sites.

### **Existing System:**

Social networking services have been prevalent at many online communities such as Twitter.com and Weibo.com, where millions of users keep interacting with each other every day. One interesting and important problem in the social networking services is to rank users based on their vitality in a timely fashion. An accurate ranking list of user vitality could benefit many parties in social network services such as the ads providers and site operators. Although it is very promising to obtain a vitality-based ranking list of users, there are many technical challenges due to the large scale and dynamics of social networking data.

#### **Disadvantages:**

- Performance low

### **Proposed System**

We propose a unique perspective to achieve this goal, which is quantifying user vitality by analyzing the dynamic interactions among users on social networks. Examples of social

network include but are not limited to social networks in microblog sites and academical collaboration networks. Intuitively, if a user has many interactions with his friends within a time period and most of his friends do not have many interactions with their friends simultaneously, it is very likely that this user has high vitality. Based on this idea, we develop quantitative measurements for user vitality and propose our first algorithm for ranking users based vitality. Also we further consider the mutual influence between users while computing the vitality measurements and propose the second ranking algorithm, which computes user vitality in an iterative way. Other than user vitality ranking, we also introduce a vitality prediction problem, which is also of great importance for many applications in social networking services. Along this line, we develop a customized prediction model to solve the vitality prediction problem. To evaluate the performance of our algorithms, we collect two dynamic social network data sets. The experimental results with both data sets clearly demonstrate the advantage of our ranking and prediction methods.

Advantages:

- High performance.s

**Modules:**

- Vitality ranking algorithms
- Predicting the user vitality

## **SYSTEM REQUIREMENTS**

**H/W System Configuration:-**

Processor	-	Pentium –III
RAM	-	256 MB (min)
Hard Disk	-	20 GB
Key Board	-	Standard Windows Keyboard

- Mouse - Two or Three Button Mouse
- Monitor - SVGA

**S/W System Configuration:-**

- Operating System : Windows95/98/2000/XP
- Application Server : Tomcat5.0/6.X
- Front End : HTML, Jsp
- Scripts : JavaScript.
- Server side Script : Java Server Pages.
- Database : MySQL 5.0
- Database Connectivity : JDBC