

# Cross platform identification of anonymous identical users using different SMN.

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**Abstract** - The last few years have witnessed the emergence and evolution of a vibrant research stream on a large variety of online Social Media Network (SMN) platforms. Recognizing anonymous, yet identical users among multiple SMNs is still an intractable problem. Clearly, cross-platform exploration may help solve many problems in social computing in both theory and applications. Since public profiles can be duplicated and easily impersonated by users with different purposes, most current user identification resolutions, which mainly focus on text mining of users public profiles, are fragile. Some studies have attempted to match users based on the location and timing of user content as well as writing style. However, the locations are sparse in the majority of SMNs, and writing style is difficult to discern from the short sentences of leading SMNs such as S in a Micro blog and Twitter. Moreover, since online SMNs are quite symmetric, existing user identification schemes based on network structure are not effective. The real-world friend cycle is highly individual and virtually no two users share a congruent friend cycle. Therefore, it is more accurate to use a friendship structure to analyze cross-platform SMNs. Since identical users tend to set up partial similar friendship structures in different SMNs, To proposed the Friend Relationship-Based User Identification (FRUI) algorithm.

## 1. INTRODUCTION

In the last decade, many types of social networking sites have emerged and contributed immensely to large volumes of real-world data on social behaviors. Twitter 1, the largest micro blog service, has more than 600 million users and produces upwards of 340 million tweets per day . Sina Microblog2, the primary Twitter-style Chinese micro blog website, has more than 500 million accounts and generates well over 100 million tweets per day .

Due to this diversity of online social media networks (SMNs), people tend to use different SMNs for different purposes. For instance, RenRen 3, a Facebook-style but anonymous SMN, is used in China for blogs, while Sina Micro blog is used to share statuses (Fig.1). In other words, every existent SMN satisfies some user needs. In terms of SMN management, matching anonymous users across different SMN platforms can provide integrated details on each user and inform corresponding regulations, such as targeting services provisions. In theory, the cross-platform explorations allow a bird's-eye view of SMN user behaviors. However, nearly all recent SMN-based studies focus on a single SMN platform, yielding incomplete data. Therefore, this study investigates the strategy of crossing multiple SMN platforms to paint a comprehensive picture of these behaviors. None the less, cross-platform research faces numerous challenges. As shown in Fig.1, with the growth of SMN platforms on the Internet, the cross-platform approach has merged various SMN platforms to create richer raw data and more complete SMNs for social computing tasks. SMN users form the natural bridges for these SMN platforms. The primary topic for cross-platform SMN research is user identification for different SMNs. Exploration of this topic lays a foundation for further cross-platform SMN research.

## 2. LITERATURE SURVEY

### A. unique and traceable are user nemeses

This paper explores the possibility of linking users profiles only by looking at their usernames. The intuition is that the probability that two usernames refer to the same physical person strongly depends on the "entropy" of the username string itself. Our experiments, based on crawls of real web services, show that a significant portion of the users' profiles can be linked using their usernames. To the best of our knowledge, this is the first time that usernames are considered as a source of information when profiling users on the Internet.

### B. Connecting corresponding identities across communities

One of the most interesting challenges in the area of social computing and social media analysis is the so-called community analysis. A well known barrier in cross-community (multiple website) analysis is the disconnectedness of these websites. In this paper, our aim is to provide evidence on the existence of a mapping among identities across multiple communities, providing a method for connecting these websites. Our studies have shown that simple, yet effective approaches, which leverage social media's collective patterns can be utilized to find such a mapping. The employed methods successfully reveal this mapping with 66% accuracy.

### C. users across social media sites: a behavioral-modeling approach.

Social media is playing an important role in our daily life. People usually hold various identities on different social media sites. User-contributed Web data contains diverse information which reflects individual interests, political

opinions and other behaviors. To integrate these behaviors information, it is of value to identify users across social media sites. This paper focuses on the challenge of identifying unknown users across different social media sites. A method to relate user's identities across social media sites by mining users' behavior information and features is introduced. The method has two key components. The first component distinguishes different users by analyzing their common social network behaviors and finding strong opposing characters. The second component constructs a model of behavior features that helps to obtain the difference of users across social media sites. The method is evaluated through two experiments on Twitter and Sina Weibo. The results of experiments show that the method is effective.

### 3. PROPOSED SYSTEM

1. As a key aspect of SMN, network structure is of paramount importance and helps resolve de-anonymization user identification tasks. Therefore, we proposed a uniform network structure-based user identification solution. We also developed a novel friend relationship-based algorithm called FRUI.

2. We are using a profile based identification based and comment based information retrieval +technique.

3. We are also doing network based by checking longitude and latitude to identify fake users

#### D. System Architecture.

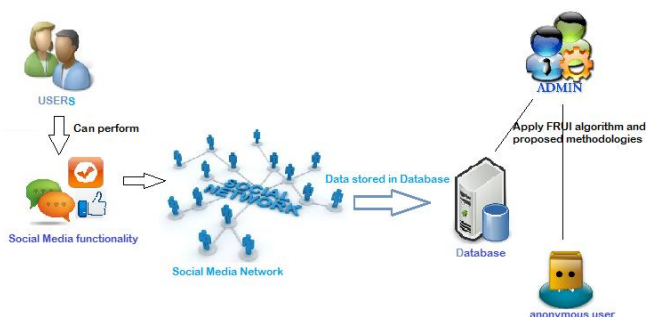


Figure 1: System Architecture of Proposed System

### 4. SYSTEM SPECIFICATION

#### Hardware Requirements

- Processor : Pentium IV
- CPU Speed : 2 GHz and above.
- RAM : 512 MB and Above
- OS : Ubuntu 14.04 and Above
- Browser : Chrome/Mozilla.

#### Software Requirements:

- Operating System: Linux
- IDE: Eclipse (juno) / Netbeans 8.2
- Programming Language: JAVA,JSP
- Java Version: JDK 1.7 or Above
- Database: MySQL 5.5
- Web Technology: JSP, Servlet, HTML, CSS, Javascript
- Web Server: Apache Tomcat 6.0

We proposed the FRUI algorithm. Since FRUI employs a unified friend relationship, it is apt to identify users from a heterogeneous network structure. Unlike existing algorithms FRUI chooses candidate matching pairs from currently known identical users rather than unmapped ones. This operation reduces computational complexity, since only a very small portion of unmapped users are involved in each iteration. Moreover, since only mapped users are exploited, our solution is scalable and can be easily extended to online user identification applications. In contrast with current algorithms, FRUI requires no control parameters.

### 5. ALGORITHM

Let S is the Whole System Consist of

$S = \{I, P, O\}$

I = Input.

$I = \{U, Q, D\}$

U = User

$U = \{u_1, u_2, \dots, u_n\}$

Q = Query Entered by user

$Q = \{q_1, q_2, q_3, \dots, q_n\}$

Users Post =  $\{p_1, p_2, \dots, p_n\}$

Timeline = T

Search = s

Friend =  $\{f_1, f_2, \dots, f_n\}$

D = Dataset

P = Process:

Step1: Social network creation.

Step2: User will register to particular social network for creating an account. User post on his/ her account

$U \rightarrow T\{p_1, p_2, \dots, p_n\}$

Step3: search friend by name & get related result

$U \rightarrow s\{fn\}$

Request accepts & reject

$R \rightarrow \{A/R\}$

if  $\{R = A\}$

“Add in friend list”

else

“Reject”

Step3: Admin will login to the system.

Step4: Admin Model

Admin will detect the anonymous user account by using a following three technique.

## **6. FUTURE SCOPE**

1. Since only mapped users are exploited, our solution is scalable and can be easily extended to online user identification applications. In contrast with current algorithms.
2. Unlike existing algorithms, FRUI chooses candidate matching pairs from currently known identical users rather than unmapped ones. This operation reduces.

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