



International Journal for Innovative Engineering and Management Research

A Peer Reviewed Open Access International Journal

www.ijiemr.org

COPY RIGHT



ELSEVIER
SSRN

2019IJIEMR. Personal use of this material is permitted. Permission from IJIEMR must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works. No Reprint should be done to this paper, all copy right is authenticated to Paper Authors

IJIEMR Transactions, online available on 23rd Nov 2019. Link

[:http://www.ijiemr.org/downloads.php?vol=Volume-08&issue=ISSUE-11](http://www.ijiemr.org/downloads.php?vol=Volume-08&issue=ISSUE-11)

Title **A CIRCUMSTANTIAL SYSTEMATIC METHOD FOR USER BEHAVIOR PATTERN IN MULTIMEDIA SOCIAL NETWORKS**

Volume 08, Issue 11, Pages: 116–120.

Paper Authors

Y.GUNADEEP, SK.KHASIM BASHA

Eswar College of Engineering, Narasaraopet



USE THIS BARCODE TO ACCESS YOUR ONLINE PAPER

To Secure Your Paper As Per **UGC Guidelines** We Are Providing A Electronic Bar Code

A CIRCUMSTANTIAL SYSTEMATIC METHOD FOR USER BEHAVIOR PATTERN IN MULTIMEDIA SOCIAL NETWORKS

Y.GUNADEEP¹, SK.KHASIM BASHA²

¹PG Student, Eswar College of Engineering, Narasaraopet

²Asst.Professor, Eswar College of Engineering, Narasaraopet

Abstract: The past decade has witnessed the emergence and progress of multimedia social networks (MSNs), which have explosively and tremendously increased to penetrate every corner of our lives, leisure and work. Moreover, mobile Internet and mobile terminals enable users to access to MSNs at anytime, anywhere, on behalf of any identity, including role and group. Therefore, the interaction behaviors between users and MSNs are becoming more comprehensive and complicated. This paper primarily extended and enriched the situation analytics framework for the specific social domain, named as *SocialSitu*, and further proposed a novel algorithm for users' intention serialization analysis based on classic Generalized Sequential Pattern (GSP). We leveraged the huge volume of user behaviors records to explore the frequent sequence mode that is necessary to predict user intention. Our experiment selected two general kinds of intentions: playing and sharing of multimedia, which are the most common in MSNs, based on the intention serialization algorithm under different minimum support threshold (*Min_Support*). By using the users' microscopic behaviors analysis on intentions, we found that the optimal behavior patterns of each user under the *Min_Support*, and a user's behavior patterns are different due to his/her identity variations in a large volume of sessions data.

1. INTRODUCTION

The rapid development of Multimedia Social Networks (MSNs) causes the tremendous growth of users and digital contents. It's also convenient for users to access digital contents in MSNs with a large-scale video dataset [1]. Meanwhile, the interaction between user and user, user and system increases. Therefore, providing users with timely and rapidly personalized services considering the complex interaction[2] is now a challenge in the study of multimedia social networks. Generally speaking, multimedia computing can be decomposed into three different stages, from data centric multimedia

compression, content-centric multimedia communication and content analysis, to user-centric social media analysis till today, including user trust modeling [3, 4], propagation paths mining [5, 6] and digital right sharing [7], and digital forensics[8-10]. However, understanding and predicting what multimedia content users' real needs in different situations and contexts have not been well studied [11]. Context-Aware (CA) [12-15] was first proposed by Schilit et al in 1994. They defined context as the set of location, people nearby, objects, and the changes of the objects. Prof. Carl K. Chang [16] proposed the Situ theory by combining

the service environment with situation awareness to handle the dynamic update or development of service at run time. Therefore the service can meet the changing needs of users and provide users with personalized service. In order to adapt to the dynamic service environment and make a timely respond to the feedback of service environment, social media services increasingly require situation awareness. In social media networks, the human being is a complex and open system. The individual's intention can change at any time, which also causes a change in the user's needs. Moreover, the user's context and behavior are dynamic. Some studies show that the characteristics of the dynamic change will have different effects in a user's potential needs [17, 18]. A user's intention can be reflected through the acquiring attributes of the user's situation awareness and feedback on resources. The system can formulate a timely personalized service for the user based on user's intention, which will increase the user's service experience. In social media networks, the user has different roles in different groups. The different identifications that the user has may cause the user's intention to change. The change of intention reflects the change in user's behavior. The Situ theory [16, 19] does not fully meet the analysis of the intention of users with different identities in the social media environment. This paper's motivation is to analyze the user's intention sequence mode(s) in social media networks. The major contributions of this paper are two folds. One is to enrich and extend the Situ theory outreaching for social domain, that is the social media ecosystem, through newly

and comprehensively considering user's changeable identity (including role and group), and the other is to propose a novel algorithm for users' behavior pattern analysis and mining. The important vision of the work is to further predict users' more and deeper intention and mental based on a large volume of previous actions.

2. EXISTING SYSTEM:

In order to allow smart phone users to access the service easily and timely, Leeetal designed a recommendation mechanism to predict user's intention and activate appropriate service; an event-conditionbehavior model and a rule induction algorithm was used to find out behavior patterns of smart phone users, and then, made use of their behavior pattern to predict and recommend the appropriate service for theusers. In order to better understand users' intention in MSNs, we greatly need to explore users' online social behavior patterns. Users' data are high noise and discrete in MSNs, especially mobile social networks , and these data can not be used for analysis and mining in time. So, there is a need to collect and preprocess users' data before our next work. Chang's situation analytics theory is oriented toward the field of software engineering, not completely appropriate for the emerging application scenario of multimedia social networks. To sum up, in order to provide users with more personalized services in the multimedia social networks, this paper established a *SocialSitu* framework on the basis of Situ-analytics theory through comprehensively considering users' context and situation in MSNs. To obtain user's

intention sequence, we proposed a novel algorithm for analyzing

3. PROPOSED SYSTEM:

Chang studied the significance and influence of the situation analysis theory and Situ framework.

software engineering, as well as introduced the Situ framework in detail, which could provide users with personalized service by identifying the new intention of the user and the real-time update of service. Mingetal raised a spatial scenario analysis based on the Situ theory and the proposed (MR)2 paradigm promoted comprehensive decision-making which is conducive to the transformation of data, information, knowledge, and wisdom (DIKW). Rahman et al stated that, in a given environment, the user could share data with friends in the social circle through the part of the social service which they are involved in. So they put forward a SenseFacen framework to recommend services for users by using perceptual data from the user sensor network and multimedia information. Shen et al put forward an algorithm which considers the surrounding

environment and social network relationship. This algorithm could make use of user's recognized situation, preference, and social network relationship to acquire user's nearest neighbours through the calculation of the user's comprehensive situation similarity, and predict the potential situation user preference to make a recommendation. Tong et al combined with the characteristics of Internet of things, to discuss information acquisition, modelling and intelligent processing etc by taking the situation awareness process as the main line.

Hence, it becomes more and more important to employ a novel situational awareness for computing services to provide users with more personalized functions, including multimedia recommendation service, customized security and privacy one, and so forth.

4. IMPLEMENTATION

User module:

User module, the new user should register application form, before enter the particular site, after login, user should create the profile for that particular login user, then only unknown user or friends, can find out your profile based on your name or images or based on particular place, user can share images and unknown user can give comment for particular images, if unknown people give a any comment for your image, you can view that person profile, then you want to your friend list that particular person you can add it.

Upload and share Images:

User can share images and unknown user can give comment for particular images, if unknown people give a any comment for your image, you can view that person profile, then you want to your friend list that particular person you can add it. User can share any kind of image, friend list and other unknown user can view your images based on your privacy setting.

Comment for particular images:

User can give comment for share and upload images and give image related comment you can add that particular person in your friend list. Then you want to your friend list that particular person you can add it. User can

share any kind of image, friend list and other unknown user can view your images based on your privacy setting.

Admin module:

admin module, admin is a super user, admin can view the all the user details, admin can view the user prediction details also.. can view the chart based on user activities

Chart module:

The past decade has witnessed the emergence and progress of multimedia social networks (MSNs), which have explosively and tremendously increased to penetrate every corner of our lives, leisure and work. Moreover, mobile Internet and mobile terminals enable users to access to MSNs at anytime, anywhere, on behalf of any identity, including role and group. Therefore, the interaction behaviors between users and MSNs are becoming more comprehensive and complicated.

5. CONCLUSION:

The existing MSNs environment increasingly requires situation awareness. Users' environment and behavior are dynamic, and an individual's intention is also to change. In order to adapt to the dynamic changes of user identities in the social domain, this paper extends and enriches the Situ theory, and builds a *SocialSitu* framework for the social media networks. We design and achieve the intention serialization algorithm in multimedia social networks. The user's frequent intention sequence mode is obtained through the intention serialization algorithm. When the user's identify changes, we conclude his behavior pattern with different ID, and prove that different

SocialSitu(t) sequences are acquired in the same *Min_Support* with the same intention when his role and group change. In the future works, the existing intention sequence patterns of the user could be adopted to predict the user's more and deeper intentions. Besides, we will employ the *SocialSitu* and the proposed algorithm to improve multimedia recommendation system and some killer applications in MSNs

6. FUTURE ENHANCEMENT:

In future, we will future develop our algorithm in the following aspects:

In the future works, the existing intention sequence patterns of the user could be adopted to predict the user's more and deeper intentions. Besides, we will employ the *SocialSitu* and the proposed algorithm to improve multimedia recommendation system and some killer applications in MSNs

REFERENCES

- [1] Y. G. Jiang and J. J. Wang, "Partial Copy Detection in Videos: A Benchmark and an Evaluation of Popular Methods," *IEEE Trans. Big Data*, vol. 2, no. 1, pp. 32-42, Jan/Mar 2016, doi:10.1109/TBDATA.2016.2530714.
- [2] B. De Meester, R. Verborgh, P. Pauwels, W. De Neve, E. Mannens, and R. Van de Walle, "Towards robust and reliable multimedia analysis through semantic integration of services," *Multimedia Tools Appl.*, vol. 75, no. 22, pp. 14019-14038, Nov. 2016.
- [3] Z. Zhang and K. Wang, "A Trust Model for Multimedia Social Networks," *Soc.*

Netw. Anal. Min., vol. 3, no. 4, pp. 969-979, Dec. 2013

[4] Z. Zhang and B. B. Gupta, "Social Media Trustworthiness and Security: Overview and New Direction," *Future Generation Computer Systems*, submitted for publication

[5] W. Feng, Z. Zhang, J. Wang, and L. Han, "A Novel Authorization Delegation for Multimedia Social Networks by using Proxy Re-encryption," *Multimedia Tools Appl.*, vol. 75, no. 21, pp. 13995-14014, Nov. 2016.

[6] Z. Zhang and K. Wang, "A Formal Analytic Approach to Credible Potential Path and Mining Algorithms for Multimedia Social Networks," *Comput J.*, vol. 58, no.4, pp. 668-678, Sep. 2015.

[7] Z. Zhang, Z. Wang, and D. Niu, "A Novel Approach to Rights Sharing-Enabling Digital Rights Management for Mobile Multimedia," *Multimedia Tools Appl.*, vol. 74, no. 16, pp. 6255-6271, Aug. 2015.

[8] A. Azfar, K.-K. R. Choo, and L. Liu, "Forensic Taxonomy of Android Social Apps," *J. Forensic Sci.*, preprint, Nov. 2016, doi: 10.1111/1556-4029.13267.

[9] D. Quick and K.-K. R. Choo, "Big forensic data management in heterogeneous distributed systems: quick analysis of multimedia forensic data," *Softw. Pract. Exper.*, preprint, 2016, doi: 10.1002/spe.2429.

[10] N. H. Ab Rahman, W. B. Glisson, Y. Yang, and K.-K. R. Choo, "Forensic-by-design framework for cyber-physical clouds systems," *IEEE Cloud Comput.*, vol. 3, no. 1, pp. 50-59, Feb 2016.

[11] P. Cui, W. Zhu, T. S. Chua, and R. Jain, "Social-Sensed Multimedia Computing,"

IEEE Multimedia, vol. 23, no. 1, pp. 92-96, Jan/Mar 2016.

[12] B. N. Schilit and M. M. Theimer, "Disseminating Active Map Information to Mobile Hosts," *IEEE Network*, vol. 8, no. 5, pp. 22-32, Sep/Oct 1994

[13] K. Srinivasan, P. Agrawal, R. Arya, N. Akhtar, D. Pengoria, and T. A. Gonsalves, "Context-aware, QoE-driven adaptation of multimedia services," *5th International Conference on Mobile Wireless Middleware, Operating Systems, and Applications*, pp. 236-249, Nov. 2012, doi: 10.1007/978-3-642-36660-4_17

AUTHORS PROFILE



Y. GUNADEEP is a student pursuing M.Tech(CSE) in Eswar college Of Engineering, Narasaraopet, Guntur.



Sk. Khasim Basha M.Tech in Computer Science & Engineering. He is currently working as an Asst Professor in Eswar College of Engineering, Narasaraopet, Guntur, India. He is having about 10 years of teaching experience in different Engineering Colleges.



International Journal for Innovative Engineering and Management Research

A Peer Reviewed Open Access International Journal

www.ijiemr.org