

Available Online at http://journalijcar.org

International Journal of Current Advanced Research Vol 5, Issue 10, pp 1360-1361, October 2016

RESEARCH ARTICLE

International Journal of Current Advanced Research

ISSN: 2319 - 6475

TRAFFIC ANALYSIS OF URBAN EMERGENCY EVENTS USING SOCIAL MEDIA DATA

Deepthy A.E and Gopikrishnan V

Krishnasamy College of Engineering & Technology, Cuddalore, Tamil Nadu

ARTICLE INFO ABSTRACT	ARTICLE INFO	A B S T R A C T
-----------------------	--------------	-----------------

Article History:

Received 29th July, 2016 Received in revised form 15thAugust, 2016 Accepted 28th September, 2016 Published online 28th October, 2016

Key words:

Traffic analysis, content filtering, personalized word predictor.

Social media data are used to reduce road traffic. A novel platform for providing geographical information are done by the social media feeds. The content from social media usually includes references to urban emergency events occurring at, or affecting specific locations. The detection of urban emergency events are done using the 5W Model. The spatial and temporal information from the social media are extracted to detect the real time event. We point out the advantages of detecting urban emergency events with more accuracy and efficiency of the proposed method and with great importance to protect the security of humans. We also enhance the feature and security of social network by providing content filtering in user wall & chat. Secondary personalized word prediction in chat.

© Copy Right, Research Alert, 2016, Academic Journals. All rights reserved.

INTRODUCTION

In current scenario it is difficult to get the event going in around our area. We propose a system using social media which enables user to know about event going in and around our area. Once user try to create the event he gets knowledge about the event different events occurring at same date and at same time. Firstly, users of social media are set as the target of crowd sourcing. Crowdsourcing is also an emerging computing paradigm that tasks everyday users to form participatory sensor network. It allows the increasing number of social users to share local knowledge acquired by their sensor-enhanced devices, e.g., to monitor pollution level or noise level, traffic condition, etc. The sensing data from volunteer contributors such as social network users can be further analyzed and processed, and leveraged in many areas such as environment monitoring, urban planning, emergency management, as well as public healthcare/safety [1][2].

Second Implementation of personalized word predictor with personalized content filtering in chat using short text classifier for filtering the filter words.

Word prediction can facilitate everyday communication on chat in social network by reducing the physical interactions required to produce dialogue with them[3]. To support personalized word prediction, a text prediction system should learn from the user's own data to update the initial learned likelihoods that provide high quality "out of the box" performance. Within this lies an inherent trade-off: a larger corpus of initial training data can yield better default performance, but may also increase the amount of user data required for personalization of the system to be effective[4].

The 5W model

In order to detect and describe the real time urban emergency event, the 5W (What, Where, When, Who, and Why) model is proposed [5].

- What: The most important element of the proposed 5W model is to detect what happened in the urban environment.
- Where: Besides detecting what happened in the urban environment, it is needed to reveal the location information of the urban emergency event.
- When: Temporal data gives a very good real time feature.
- Who: Different person act different roles in an urban emergency event.
- Why: An emergency event is a sudden, urgent, usually unexpected incident or occurrence that requires an immediate reaction or assistance for emergency situations.

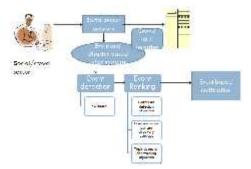


Fig.1 Architecture diagram for traffic reduction using social media

Social network administration

Admin maintains the entire application rights. Admin can view user details, event details and trust user details. Admin

maintain trust user details so that he can change the trust level of the trust user in case any wrong info post. Admin can view event going through in each area with no user attending the event. Admin get the request for trust user he can accept or reject the request based on user existence in social network his activity and no trusted user in the same area [6].

User

User can register and get the login rights. User can give friend request or accept the request. User also can post on the wall and chat with friends. User also add event details with event name, location and date, time details. User can accept the event which they are attending if any accidents take place user will get alerts about accident and route to taken for safety.

Trusted user

One or more trusted user will be available in each location. Trust user can view event that takes place in their location and other locations. If any accident takes place in their location trust user will post the accident details on their interest

Traffic analysis

Trust user will post accident details in their location. Once the trust user post, system automatically compares the accidents location with event currently going on in that particular location. If it matches with event it will alert the user with accident details with safety route details [7] [8].

CONCLUSION

Crowdsourcing technique is used to get data from the social media and hence it is used to reduce traffic. The content from social media often includes references to urban emergency events occurring at, or affecting specific locations. The spatial and temporal data are extracted and used to detect the event occurring. Therefore it helps to lead a secured human life.

References

- 1. Zheng Xu, Member, IEEE, Yunhuai Liu, Member, IEEE, Neil Y. Yen, Member, IEEE, Lin Mei, Member, IEEE, Xiangfeng Luo, Member, IEEE, Xiao Wei, and Chuanping Hu, Member, IEEE, Crowdsourcing based Description of Urban Emergency Events using Social Media Big Data, 2168-7161, 2015.
- 2. Y. Zheng, F. Liu, and H. Hsieh. U-Air: When Urban Air Quality Inference Meets Big Data. *In Proceedings* of the 19th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, pp. 1436-1444, 2013.
- 3. C. Hu, Z. Xu, et al. Semantic Link Network based Model for Organizing Multimedia Big Data. *IEEE Transactions on Emerging Topics in Computing*, DOI:10.1109/TETC.2014.2316525.
- 4. D. Haddow, A. Bullock, and P. Coppola. Introduction to Emergency Management, 2010.
- 5. Y. Zheng. Tutorial on Location-Based Social Networks. In *Proceedings of the 21st International World Wide Web conference*, 2012.
- T. Sakaki, M. Okazaki, and Y. Matsuo. Earthquake Shakes Twitter Users: Real-time Event Detection by Social Sensors. In *Proceedings of the 19th international World Wide Web conference*, pp. 851-860, 2010.
- 7. V. Krishnamurthy and H. Vincent Poor. A Tutorial on Interactive Sensing in Social Networks. *IEEE Transactions on Computational Social Systems*, early access, 2014.
- 8. G. Valkanas and D. Gunopulos. How the Live Web Feels about Events. In *Proceedings of ACM Conference of Information and Knowledge Management*, pp. 639-648, 2013.
