

Real-Time Identification and Characterization of Events in Social Media

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With the increasing volume of location-annotated content from various social media platforms like Twitter, Instagram and Foursquare, we now have real-time access to people's daily documentation of local activities, interests and attention.

At the same time, much of the content on Social Media does not correspond to any particular trending event, making the separation between trending event and non-event content challenging and essential for the unknown event identification task.

Event detection from social media is a vibrant research area that draws on techniques from various fields such as machine learning, natural language processing, data mining, information extraction and retrieval, and text mining.

Goal of this project is to characterize and classify the different techniques which can be applied for real-time event detection providing an exhaustive review of existing approaches (broad survey). Finally, a few techniques should be selected and benchmarked to evaluate the performance of different detection approaches and various features on both synthetic and real datasets.

[1] Xia, C., Schwartz, R., Xie, K. E., Krebs, A., Langdon, A., Ting, J., & Naaman, M. (2014, April). Citybeat: Real-time social media visualization of hyper-local city data. In Proceedings of the companion publication of the 23rd international conference on World wide web companion (pp. 167-170). International World Wide Web Conferences Steering Committee.

[2] Atefeh, F., & Khreich, W. (2015). A survey of techniques for event detection in twitter. Computational Intelligence, 31(1), 132-164.