
Guest editorial

Digital information supply chain for social media data

Social media and social network are undoubtedly the most popular current topics, not only in information technology and computer science but also in other disciplines such as business and politics. Social media data aggregates rapidly, and the resources and formats vary widely. Social media data are therefore claimed as the best instance of “Big Data”. Thus, how to manage delivery process and analyze the data from social media is a challenging problem.

Most of existing studies in this area focus on how to analyze social media data without worrying about difficulties in managing Big Data. This special issue aims to fill this gap by covering the topic of Big Data management and its accompanying technologies and tools. This special issue has been designed to focus on the topic of information supply chain for social media data, which has been proved to be probably the best way to deal with such data. This special issue includes a total of five papers: from the 7th Workshop in Mining and Analyzing Social Networks Data for Decision Support, the 3rd Multidisciplinary International Social Networks Conference, and a few received as responses to call for papers.

The first paper is Kamil Topal and Gultekin Ozsoyoglu’s “Emotional classification and visualization of movies based on their IMDb reviews”. The authors apply the visualization approach to classify emotion based on the reviews available in a very famous movie database IMDb. To cluster movies according to different dimensions of reviewers’ emotion, the k-means clustering algorithm is used. Finally, various visualization techniques are used to present the results of clustering in order to test the proposed approach.

The second paper is Laurens Elkin, Kamil Topal and Gurkan Bebek’s “Network based model of social media big data predicts contagious disease diffusion”. This is an interesting paper discussing the prediction of the diffusion of contagious disease by network-based model of social media

Big Data. To develop the model, location factors are considered as the most important factors. The network model provides a prediction, and possible warning, to hospitals to help disease control and prevention.

The third paper is Kuo-Cheng Ting, Ruei-Ping Wang, Yi-Chung Chen, Don-Lin Yang and His-Min Chen’s “Finding m-similar users in social networks using the m-representative skyline query”. The authors are trying to find m-similar users in social networks based on users’ input search result. The approach that authors used in the paper is a so-called m-representative skyline algorithm, and the two base algorithms are naïve algorithm and R-tree algorithm. Finally, the authors use a simulation approach to test the performance of the proposed approach.

The fourth paper is Basit Shahzad, Sagib M. Nawaz, Waqar Aslam, Raza Mustafa and Atif Mashkooor’s “Discovery and classification of user interests on social media”. The focus of the paper is on the discovery and classification of user interests on social media, which is a hot topic in the area of social networks analysis. In the paper, data from twitter are used as the data source. The proposed methodology includes data labeling, modeling, machine learning (SVM) and visualization. The authors also evaluate the proposed approach by comparing other classifiers.

The fifth paper is Liang Liu, Bin Chen, Wangchun Jiang, Lingnan He and Xiaogang Qiu’s “Spatio-temporal dynamics of web pages diffused in WeChat”. In the last paper of the special issue, the authors focus on analyzing the spatio-temporal dynamics diffusion of web pages in WeChat, which is a widely used messenger service in China. Topological analysis, temporal analysis and spatial analysis are the three macroscopic analyses that form the major part of the paper. The authors use different visualization means to present the results.

All the five papers in the special issue fall within the scope of the issue and cover the most popular topics and trends in digital information supply chain for social media data analysis. The editors of the special issue believe that these papers positively contribute to the journal of information discovery and delivery.

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