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**“Event Relationship Analysis for Temporal
Event Search”**

by

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Abstract

There are many news articles about events reported on the Web daily, and people are getting more and more used to reading news articles online to know and understand what events happened. For an event (which may consist of several component events, i.e., episodes), people are often interested in the whole picture of its evolution and development along a time line. This calls for modeling the dependency relationships between component events. Further, people may also be interested in component events which play important roles in the event evolution or development. To satisfy the user needs in finding and understanding the whole picture of an event effectively and efficiently, we formalize the problem of temporal event search and propose a framework of event relationship analysis for search events based on user queries. We define three kinds of event relationships which are temporal relationship, content dependence relationship, and event reference relationship for identifying to what an extent a component event is dependent on another component event in the evolution of a target event (i.e., query event). The search results are organized as a temporal event map (TEM) serving as the whole picture about an event's evolution or development by showing the dependence relationships between events. Based on the event relationships in TEM, we further propose a method to measure event importance degrees so as to discover the important component events for a query. Experiments conducted on a real data set show that our method outperforms a number of baseline methods, and it can help discover certain new relationships missed by previous methods and even human annotators.

Biography

Qing Li is a Professor at the Department of Computer Science, City University of Hong Kong where he joined as a faculty member since Sept 1998. Meanwhile, he is a Guest Professor at the Zhejiang University and at the Zhongshan (Sun

Yat-Sen) University, an Adjunct Professor at the University of Science and Technology of China, the Hunan University, and the State Key Lab of Software Engineering, Wuhan University. He received his B.Eng. from the Hunan University, and M.Sc. and Ph.D. degrees from the University of Southern California (Los Angeles), all in computer science. His research interests include database modeling, Web services, multimedia retrieval and management, and e-learning systems. He has authored over 290 papers in technical journals (incl. ACM and IEEE Transactions) and international conferences (incl. VLDB, WWW, ICDE, ACM MM, ICDCS). He is actively involved in the research community by serving as an editor of technical journals, including ACM Transactions on Internet Technology, IEEE Transactions on Knowledge and Data Engineering, and World Wide Web, and as Conference and Program Chair/Co-Chair of numerous major international conferences. He is currently the Chairman of the Hong Kong Web Society, the Deputy Chairman of the WISE Society, a Councilor of the Database Society of Chinese Computer Federation (CCF), and a Steering Committee Member of DASFAA, ICWL, and WAIM. Prof. Li is a Fellow of IET (UK), and a senior member of IEEE (US) and CCF (China).

ALL ARE WELCOME!