The VLDB Journal (2010) 19:759–760
DOI 10.1007/s00778-010-0201-y

FOREWORD

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Published online: 25 November 2010

Inter-personal relationships are a prerequisite for any kind of social growth and for progress in the sciences and technology. Recent developments allow us to make such relationships and the networks they lead to explicit. Platforms supporting such social networks now are ubiquitous; most of us are a part of at least one such network. Social networking platforms have given rise to a broad range of applications and to systems leveraging such networks, e.g., to establish new contacts, for marketing purposes, and for new digital games, just to name a few.

However, managing the data created by social networks and analyzing it is challenging and brings about problems that currently are either unsolved, or lack efficient and/or elegant solutions. The issues range from diversity of the data (e.g., text and images of various kinds and links) to demanding system requirements (e.g., throughput, robustness, scalability), to enhanced information discovery paradigms, to sophisticated analysis and mining, and to exciting new opportunities (e.g., online exchange markets). With this current issue of the VLDB Journal, our objective has been to bring out the state of the art in research and to highlight ideas and achievements as well as to identify worthwhile topics for future research.

Altogether, there have been twenty-three submissions of very good quality. Out of these, with the strong support of many reviewers who are well renowned in this and related fields, we have ended up accepting six for publication. Every paper was reviewed by three reviewers. Papers were initially shortlisted from a first round of reviews. The final selection was made after a second round of reviews. We believe this special issue well represents the current state of the art in this area.

One article, "Social Bookmark Weighting for Search and Recommendation", is authored by David Carmel, Haggai Roitmann, and Elad Yom-Tov. An important problem regarding social bookmarking is to make use of them for recommendations and for search in a way that is effective. This is difficult because of quality issues such as spam or polysemy. The article features a proposal to weight bookmarks by combining weights in various spaces including users, tags, and documents. The authors have studied the impact of various parameters and have evaluated their approach on two real social bookmarking data sets.

In line with the fundamental importance of the topic, two articles have a focus on privacy. The article "Privacy Policies for Shared Content in Social Network Sites" by Anna C. Squicciarini, Mohamed Shebab, and Joshua Wede addresses an increasingly important problem and proposes a reasonable solution in terms of both theoretical guarantees and practicality. Think of digital images that typically display more than one individual. Here, the content essentially is shared content. However, only the user who uploaded the image has control over its display. This calls for mechanisms dealing with joint ownership and for resolving privacy conflicts. The solution presented by the authors is one with its foundations rooted in economics, and the authors describe a viable implementation.

The other paper on privacy, entitled "Resisting Structural Re-identification in Anonymized Social Networks", is authored by Michael Hay, Gerome Miklau, David Jensen, Don Towsley, and Chao Li. The paper studies how to exploit

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structural knowledge in order to infer personal information from (the structure of) social networks anonymized in a naive way. The authors provide a theoretical analysis of the privacy risk for different kinds of graphs and describe experimental results on real-world social networks. Against a new definition of anonymity tailored to this context, they propose a novel algorithm to anonymize such graphs to shield against respective attacks.

There are two papers in this special issue where authors report on their experiences in the context of real social networks. The article "Multimodal Social Intelligence in a Real-Time Dashboard System" by Daniel Gruhl, Meena Nagarajan, Jan Pieper, Christine Robson, and Amit Sheth gives an overview of a system called SoundIndex. Its objective is to identify current trends regarding the kind of music people currently listen to by analyzing a broad range of sources, including special interest social networks on music. They have consciously decided to identify those trends in ways different from merely looking at sales numbers. The authors describe the key difficulties, give an architectural overview of SoundIndex, describe their main design decisions, and report on various experiments. The project behind SoundIndex has been ambitious, in no small part because SoundIndex is supposed to be an operational system available to the general public.

Dominik Benz, Andreas Hotho, Robert Jäschke, Beate Krause, Folke Mitzlaff, Christoph Schmitz, and Gerd Stumme describe "The Social Bookmark and Publication Management System BibSonomy". The paper describes a system and the research centered around the design of its various components, which the authors have conducted in the recent past. The paper is structured around the various steps a user goes through when interacting with the system.

Recommender systems are typically concerned with making predictions of item scores for individual users and with recommending items with top predicted scores to the users. The utility of generating recommendations for groups of users has been noted for some time. In their paper, entitled "Space Efficiency in Group Recommendations", Senjuti Basu Roy, Sihem Amer-Yahia, Ashish Chawla, Gautam Das, and Cong Yu tackle interesting algorithmic challenges in generating group recommendations under space constraints by taking a formal approach to capturing group consensus in generating the recommendations. They propose two alternative algorithmic solutions for this important problem.

We sincerely believe the articles appearing in this special issue will be useful and interesting to researchers working in social networks and social media and help inspire influential future research in this important area.

We sincerely thank all authors for their submissions to this special issue. Among the many high-quality submissions, we have had to select a small number for publication through a thorough and intensive review process. We are heavily indebted to the numerous reviewers, recognized as experts in this field, for their precious time in helping with this special issue and for their careful reviews. We also thank the editors-in-chief of the VLDB Journal who have given us the opportunity to put together this special issue. They have kept supporting us throughout the evolution of this special issue. Thank you to last year's editors of the special issue as well for their advice! Finally, we thank the various individuals from Springer we have interacted with while putting together this special issue.

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