Special Issue on Design and Mining for Social-Aware Services

FOREWORD

Social-aware services have not only changed the way in which information is disseminated but also played a crucial role for intersections among people nowadays. Clearly, lots of interactions among people are collected and stored in social-aware services. With the proliferation of social-aware services, huge amounts of data about human interactions exist. Social community discovery and human interaction pattern extraction are important issues for knowledge mining and platform design in social-aware services.

This special issue includes five papers. In the first paper, “The Clustering of Hot Topics on Plurk,” the authors propose a method for users to find other users they are interested by clustering users with their similar time and correlation topics. This approach can be used on Plurk and applied on other community sites, such as Facebook and Twitter, to build a complete event list and relevant groups of users who are interested in these events. The second paper, entitled “CSM: A Framework of Recommendation System Combing Network Structure and Messages,” combines the social network features into the recommendation system to enhance the development of a social network on the website and achieves in higher recommendation accuracy than existing method which is based on the message ratio. The third paper, “Gaze-based Feedback in Assessing Media Relevance,” proposes a framework to understand the user behavior in Web searching and browsing by estimating the relevance of a Web entity and user’s eye movement. This study demonstrates that the eye movement measures can reveal the semantic relevancy between a word and an image and can be applied into a context that requires a semantic-based information search. In the forth paper, “Mining Sequential Association Rules Efficiently by Using Prefix Projected Databases,” a new concept of sequential association rules is introduced and such rules can provide valuable knowledge in many real applications. The authors in “Mining Spatial-Temporal Movement Profile of Mobile Users for Social-Aware Applications” explore a new kind of movement profiles for location prediction. To provide an accuracy and conciseness model of mobile users’ movement behavior, a movement profile is discovered and enhanced by considering both spatial and temporal features.

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