Preface

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This special issue of Journal of Combinatorial Optimization (JOCO) includes full journal versions of 8 papers selected from the papers presented at the 2013 Workshop on Computational Social Networks (CSoNet 2013) held in Hangzhou, China on June 22, 2013. The invited papers have gone through the standard refereeing process of JOCO to ensue high publication standard. The articles are ordered alphabetically by the last names of the first authors. The first two papers study different aspects of influence propagation in social networks. While Bi et al. focused on the influence propagation inside communities and how it makes the communities expand, Fan et al. emphasized on the effect of individuals interest. Greetham et al. studied an extended version of Katz centrality in evolving communication networks and brought up the relation between the choice of attenuation factor and the spectral radius, the largest eigenvalue. Given a series of snapshot of a network, Han et al. proposed constructions of uncertain graphs for different scenarios. Kim et al. investigated the forming a decision making group to avoid extreme hyperpartisanship. They introduced a new formulation, called minimum k -core dominating set problem, and provide NP-completeness proof and an approximation algorithm for $k = 2$.

Qiang et al. provided a high-performance algorithm based on the distributed HBase system for the shortest path problem. The algorithm was illustrated to be very scalable even for very large networks of hundreds of millions of users. Wang et al. studied community structure in evolving and noisy networks and proposed an update method

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to integrate both historical and current information of the network and a measure to detect change points in communities. Zhao et al analyzed Weibo, the largest microblog service in China, and proposed a new spreading model to accurately predict short-term trend topics.

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