Some Computational Challenges in Mining Social Media

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Abstract
People of all walks of life use social media for communications and networking. Their active participation in numerous and diverse online activities continually generates massive amounts of social media data. This undoubtedly “big” data presents new challenges to data mining, including how to select salient features for social media data with varied relations, how to assess user vulnerability, and how to ensure that patterns discovered from social media data are valid when no ground truth is available. We will illustrate the intricacies of social media data, present original social-computing problems, deliberate approaches to mining social media data to gain insight from real-world applications and deepen our understanding, and exploit unique characteristics of social media data in developing novel algorithms and computational tools for social media mining.

Short Bio
Dr. Huan Liu is a professor of Computer Science and Engineering at Arizona State University. He obtained his Ph.D. in Computer Science at University of Southern California and B.Eng. in EECS at Shanghai JiaoTong University. He was recognized for excellence in teaching and research in Computer Science and Engineering at Arizona State University. His research interests are in data mining, machine learning, social computing, and artificial intelligence, investigating problems that arise in real-world applications with high-dimensional data of disparate forms. His well-cited publications include books, book chapters, encyclopedia entries as well as conference and journal papers. He serves on journal editorial/advisory boards and numerous conference program committees. He is a Fellow of IEEE and a member of several professional societies.