Message from BigMUD-2013 Workshop Co-Chairs

It is our great pleasure to welcome you to the First International Workshop on Mining and Understanding from Big Data (BigMUD-2013), which is held in conjunction with the 13th IEEE International Conference on Data Mining (ICDM-2013) in Dallas, Texas, USA on December 7-10, 2013.

Due to the rapid development of IT technology and the consequent decrease of cost on collecting and storing data, big data has been generated from almost every industry and sector, including retail, finance, banking, security, audit, electric power, healthcare, to name a few. However, it is extremely difficult to store, aggregate, manage, and analyze big data and finally mine valuable information/knowledge from it because of its massive volume and inherent complexity. Therefore, in the presence of big data, the models, algorithms and methods for traditional data mining become no longer effective and efficient. On the other hand, some data is generated exponentially or super-exponentially in a streaming manner. Therefore, how to carry out real-time analysis on, and deep mining and understanding from big data so as to obtain dynamical and incremental information/knowledge, is another grand challenge. In general, at the era of big data, it is expected to develop new models, algorithms, methods, and even paradigms for mining, analyzing, and understanding big data.

This workshop aims to provide a networking venue that will bring together big data scientists, researchers, professionals, and practitioners from both industry and academia and from different disciplines (including computer science, social science, network science, etc.) to exchange ideas, discuss solutions, share experiences, promote collaborations, and report state-of-the-art research results and technological innovations on various aspects of mining and understanding from big data. It is also to complement the spectrum of ICDM-2013 and to provide additional breadth and depth to the main conference. To this end, six high-quality papers were finally accepted upon a rigorous peer-review process.

The topics in our workshop include the following: acquisition, representation, indexing, storage, and management of big data; processing, pre-processing, and post-processing of big data; models, algorithms, and methods for big data mining and understanding; knowledge discovery and semantic-based mining from big data; metric/similarity learning for big data; visualizing analytics and organization for big data; context data mining from big Web data; social computing over big Web data (e.g., network analysis, community detection); and industrial and scientific applications of big data mining such as search and recommendations.

We are very grateful to the Workshop Chairs of the ICDM-2013 Organizing Committee, Dr. Wei Ding and Dr. Takashi Washio, for their support and guidance that make the workshop possible. We highly appreciate the members of the Program Committee for their valuable time and
profound expertises for reviewing papers. We would also like to thank all the authors who submitted papers to the workshop.

We hope that you will find this program interesting and thought-provoking and that the workshop will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world. We are looking forward to a very exciting and interesting workshop.

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Charles X. Ling, Western University, Canada
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Workshop Co-Chairs of BigMUD-2013
BigMUD-2013 Organizing and Program Committees

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