International Workshop on Contrast Data Mining and Applications

DECEMBER 11, 2011, VANCOUVER, CANADA

Contrast data mining is concerned with the mining of patterns and models that contrast two or more datasets, which can be classes or defined by conditions on data instances. Contrast patterns and models can describe similarities or differences between the datasets. Contrast mining is useful since it can help scientists and engineers understand datasets and their associated applications, since it can help researchers solve other fundamental data mining problems (e.g. classification, clustering), and since it can help tackle challenging application problems in medicine, science, engineering, and business. The purpose of this workshop is to provide an opportunity for researchers to share their recent research results and experiences in the area of contrast data mining.

The call for papers attracted considerable attention from the community and seven high quality submissions (including transfers from the ICDM conference) from Canada, China, France, Japan, and Germany were received. The Workshop Program consists of five papers, including four papers accepted from the submissions, and a paper that provides an overview on Contrast Data Mining as a field and gives a preview of an upcoming book on the topic. We would like to thank the program committee whose valuable reviews helped select the best submitted papers.

We hope that you will find the workshop interesting and fun. We also hope that the workshop provides a useful opportunity for you to learn more about Contrast Data Mining, to find out what has been done and what remains to be done in this interesting and stimulating area of research.

Guozhu Dong and James Bailey
Workshop Program Committee Co-Chairs

Program Committee

James Bailey, University of Melbourne, Australia Hong Cheng, City University of Hong Kong, China Guozhu Dong, Wright State University, USA Lei Duan, Sichuan University, China Jiawei Han, Univ of Illinios at Urbana-Champaign, USA Xiaonan Ji, GE Capital, Australia Jinyan Li, University of Technology Sydney, Australia Shihong Mao, Wayne State University, USA Sebastien Nedjar, University of Mediterranee, France Krzysztof Walczak, Warsaw U of Technology, Poland Philip Yu, University of Illinois at Chicago, USA Xiuzhen Zhang, RMIT, Australia

List Of Papers To Be Presented At The Workshop

SL209: Guozhu Dong and James Bailey, "Overview of Contrast Data Mining as a Field and Preview of an Upcoming Book"

SL204: Arnaud Soulet, Bruno Crémilleux, and Marc Plantevit, "Summarizing Contrasts by Recursive Pattern Mining"

SL208: Carson Leung and Chris Carmichael, "Visually Contrast Two Collections of Frequent Patterns"

SL205: Tomonobu Ozaki and Minoru Etoh, "Correlation and Contrast Link Formation Patterns in a Time Evolving Graph"

SL207: Xiangtao Chen and Lijuan Lu, "A New Algorithm Based on Shared Pattern-tree to Mine Shared Emerging Patterns"