Contrast pattern mining and its applications
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Abstract
The ability to distinguish, differentiate and contrast between different data sets is a key objective in data mining. Such ability can assist domain experts to understand their data, and can help in building classification models. This presentation will introduce the principal techniques for contrasting data sets. It will also focus on some important real world application areas that illustrate how mining contrasts is advantageous.

References
4) Hamad Alhammady, Kotagiri Ramamohanarao: The Application of Emerging Patterns for Improving the Quality of Rare-Class Classification. PAKDD 2004: 207-211
5) Hamad Alhammady, Kotagiri Ramamohanarao: Using Emerging Patterns and Decision Trees in Rare-Class Classification. ICDM 2004: 315-318
6) Hamad Alhammady, Kotagiri Ramamohanarao: Expanding the Training Data Space Using Emerging Patterns and Genetic Methods. SDM 2005
8) Hongjian Fan, Kotagiri Ramamohanarao: An Efficient Single-Scan Algorithm for Mining Essential Jumping Emerging Patterns for Classification. PAKDD 2002: 456-462
9) Hongjian Fan, Kotagiri Ramamohanarao: Efficiently Mining Interesting Emerging Patterns. WAIM 2003: 189-201
10) Hongjian Fan, Kotagiri Ramamohanarao: Noise Tolerant Classification by Chi Emerging Patterns. PAKDD 2004: 201-206
13) Jinyan Li, Guozhu Dong, Kotagiri Ramamohanarao: Instance-Based Classification by Emerging Patterns. PKDD 2000: 191-200
17) Jinyan Li, Kotagiri Ramamohanarao, Guozhu Dong: Combining the Strength of Pattern Frequency and Distance for Classification. PAKDD 2001: 455-466
19) Ramamohanarao, K. and Bailey, J. and Fan, H. Efficient Mining of Contrast Patterns and Their Applications to Classification, Third International Conference on Intelligent Sensing and Information Processing, 2005 (39--47).
22) Xiuzhen Zhang, Guozhu Dong, Kotagiri Ramamohanarao: Information-Based Classification by Aggregating Emerging Patterns. IDEAL 2000: 48-53