

CS Seminar

A Leap Approach for Mining Large Patterns

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Venue:
Room 308
Chow Yei Ching Bldg
The University of Hong Kong

Abstract:

Real-life applications in many areas today have generated data of huge sizes and ever-increasing complexity. These data range from large item-sets in all kinds of relational databases, long sequences in bio gene study, search engine query logs and program execution traces, all the way to large networks such as World Wide Web, social networks like Facebook, bio-networks and other interactive systems in business intelligence. In many of these applications, large patterns are of particular interest. Efficient algorithms are in urgent need to discover these patterns of significant sizes from large-scale data.

In this talk, I will introduce a new paradigm of large pattern mining based on the idea of leaping in the pattern lattice. I will illustrate the idea with a set of novel algorithms to mine patterns of large sizes efficiently from large data sets, from item-sets to graphs/networks. With the new technology, we are able to discover interesting large patterns in data sets where existing methods can hardly proceed.

About the Speaker:

Mr. Feida Zhu is a Ph.D. candidate of DAIS (Data and Information Systems) group in Computer Science Department at University of Illinois at Urbana-Champaign. He is co-advised by Prof. Jiawei Han and Prof. Jeff Erickson. His research interests are data mining, data and knowledge management and algorithms in general. Currently, his primary interests include constraint-based sequential and graph pattern mining and large-scale information/social network analysis, with applications on web, management information systems, business intelligence and bioinformatics. His thesis research has won Best Student Paper Awards in 2007 International Conference on Data Engineering (ICDE '07) and 2007 Pacific-Asia Conference on Knowledge Discovery and Data Mining// (PAKDD '07). He got his B.S in Computer Science from Fudan University in China.

All are welcome!
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