Database and Data Mining Lab

Web Site

TURNING DATA INTO KNOWLEDGE

In today's information society, we witness an explosive growth of the amount of data becoming available in electronic form and stored in large databases. Data mining is the process of turning data into useful knowledge by finding previously unknown patterns in large databases.

Our lab was one of the earliest contributors to the field of data mining and we enjoy innovative new algorithms that advance the field even further. FPGrowth, DBScan, PrefixSpan are some of the many well-known and widely used algorithms innovated by our Lab. Our algorithms are currently used by leading retailers, banks, finance firms, online shopping portals, search engines, database software vendors and private and governmental research institutions.

Some of our current research projects are:

- Privacy preserving data mining
- Genomics data mining for personalized medicine
- Geo-spatial data mining for crime prevention
- Mining graph and multi-relational data for community identification in social networks

We have strong ties with the industry, research institutions and the government such as NSERC, Michael Smith Foundation for Health Research, IBM and Hewlett-Packard. Our funding consists of 11 grants from Canadian government and industry.

We are honored to have been awarded 3 best papers, 1 runner up paper and 1 B.C. Innovation Council Young Investigator award.