Preface of the Workshop on Mining Multidimensional Data

A. Laurent¹, M. Plantevit¹, J. Pei²

 ¹ LIRMM, Université Montpellier 2, CNRS, 161 rue Ada, 34392 Montpellier, France
² School of Computing Science, Simon Fraser University, 8888 University Drive, Burnaby, BC Canada V5A 1S6

Multidimensional data are inherent in many applications such as e-commerce, telecommunication, retail, financial markets, scientific data, bioinformatics data. Mining multidimensional data plays a critical role in both theoretical data mining research and practical data mining development.

The First International Workshop on Multidimensional Data Mining (MMD'08) is an interactive forum to reflect the latest advances and understand the new challenges and opportunities in mining multidimensional data. The workshop focuses on three aspects: mining multidimensional data, mining aggregated data, and managing hierarchies.

This workshop aims at bringing together researchers from universities, research labs and industry who are involved in various research areas of multidimensional data mining.

The main topics addressed by the workshop include:

- Data models, techniques and methodologies for multidimensional data mining
- Mining unstructured and structured data
- Mining spatial, temporal and multimedia data
- Data mining techniques for multidimensional data: clustering, classification, association rules, and more
- Mining exceptional patterns and outliers in multidimensional data
- Mining multidimensional (multiple) data streams
- Mining multiple time series
- Trend analysis
- Maintaining, storing, and re-using the extracted multidimensional knowledge
- Parallel and distributed multidimensional data mining
- Data mining applications, such as fraud detection, financial or scientific applications, web usage mining, bioinformatics, and marketing

As far as this first edition is concerned, the program includes one invited industrial talk providing an industrial perspective on mining multidimensional data, four research talks, dealing with the up-to-date problems and solutions, and a panel discussion on the opportunities and the future of multidimensional data mining.

On behalf the workshop organization committee, the workshop co-chairs (Anne Laurent and Jian Pei) and the workshop organization chair (Marc Plantevit) want to thank all authors who submitted their high quality papers to the workshop, and hope that all participants will enjoy the exciting workshop program.