



Proceedings of the 1st International Workshop on
**PATTERN REPRESENTATION AND
MANAGEMENT**
(PaRMa 2004)

in conjunction with the
9th International Conference on Extending Database Technology, EDBT 2004

Yannis Theodoridis, Panos Vassiliadis (Eds.)

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Heraklion, Crete, Hellas,
Thursday, March 18, 2004

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Foreword

This report contains the papers accepted for presentation at the 1st International Workshop on Pattern Representation and Management (PaRMa) held in conjunction with the EDBT'04 Conference in Heraklion, Crete, Hellas, on March 18th, 2004.

The increasing opportunity of quickly collecting and cheaply storing large volumes of data, and the need for extracting concise information to be efficiently manipulated and intuitively analyzed, are posing new requirements for DBMSs in both industrial and scientific applications. A usual approach to deal with such huge volume of data is to reduce the available data to knowledge artifacts (i.e., clusters, rules, etc.), also called *patterns*, through data processing methods (pattern recognition, data mining, knowledge extraction) that reduce their number and size to make them manageable from humans while preserving as much as possible their hidden / interesting information. In order to efficiently and effectively deal with patterns, academic groups and industrial consortiums have devoted efforts towards the modeling, storage, retrieval, analysis and manipulation of patterns with results mainly in the area of standards, inductive databases and pattern-base management systems. The workshop aims at bringing together researchers and practitioners in the area of pattern representation and management.

The main theme for this PaRMa workshop was “From Data to Patterns”. In response to the call for papers, 15 papers were submitted. The Program Committee selected 9 papers based on their scientific contribution, novelty and relevance to the workshop. Due to its obvious database-centric perspective, PaRMa includes three papers on modelling and pattern manipulation languages. A second area of interest involves the management of patterns with a particular focus on pattern similarity and prediction. Finally, following a long tradition in the area of data mining, the technical program of PaRMa includes three papers on systems and algorithms for pattern extraction.

On behalf of the Program Committee we would like to thank all the authors of submitted papers and all the referees for their careful work. The support of the European Commission through the IST/FET Programme and the PANDA Working Group is also gratefully acknowledged. Finally, we would like to express our gratitude to the members of the Organizing Committee of EDBT'04 for their support in organizing this workshop.

Yannis Theodoridis, Panos Vassiliadis

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