Preface

This volume contains the Proceedings of ICFCA 2007, the Fifth International Conference on Formal Concept Analysis. The ICFCA conference series intends to serve as a distinguished forum for state-of-the-art research from foundational to applied lattice theory and related fields, all of which involve methods and techniques in the realm of FCA. We believe this year’s conference provided a continuation of the high standard of its predecessors.

Formal concept analysis ranges from restructuring general algebra and lattice theory, on the one hand, to providing high-level conceptual analysis and knowledge processing techniques in various applied disciplines, on the other hand. This is due to the fact that FCA allows transforming relational data into implications and dependencies and, vice versa, exploring plausible hypotheses, suggested implications, or expected dependencies against data. This all is connected with the investigation of hierarchical aspects of information—based on a mathematical formalization of conceptual hierarchy. The field of FCA has been developing way beyond its original scope and attracts a still-growing number of sophisticated research scholars, who vary from theoreticians to more practical problem solvers. This volume reflects the diversity between fundamental methods and applied techniques, explored by an enthusiastic research community. Here, we only mention research areas such as data visualization, information retrieval, machine learning, data analysis and knowledge management.

ICFCA 2007 covered practical data analysis and problem solving as well as foundational progress of the field. The algorithmic side was in balance with theoretical discoveries. All regular papers in this volume were refereed by independent domain experts, although the Program Chairs are responsible for the final decision on publications in this volume. To assure a high-quality standard, the close involvement of the Program Committee and the Editorial Board in any decision making was crucial.

The General Conference Chair of ICFCA 2007, held in Clermont-Ferrand, France, was Lhouari Nourine. The success of the conference was a result of all involved, in particular, the General Conference Chair together with the Conference Organizing Committee, and the Editorial Board in conjunction with the Program Committee—to all of whom we express our warmest thanks. The activity of the first Program Co-chair in preparing the volume was supported by the DFG project “Concepts and Models” (COMO).

February 2007

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