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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Towards Generic Pattern Mining -- Conceptual Exploration of Semantic Mirrors -- Towards a Formal Concept Analysis Approach to Exploring Communities on the World Wide Web -- Automatic Selection of Noun Phrases as Document Descriptors in an FCA-Based Information Retrieval System -- Combining Spatial and Lattice-Based Information Landscapes -- Explaining the Structure of FrameNet with Concept Lattices -- Lessons Learned in Applying Formal Concept Analysis to Reverse Engineering -- Navigation Spaces for the Conceptual Analysis

of Software Structure -- Restructuring Help Systems Using Formal Concept Analysis -- An Application of FCA to the Analysis of Aeronautical Incidents -- Characterization and Armstrong Relations for Degenerate Multivalued Dependencies Using Formal Concept Analysis -- Formal Concept Analysis Constrained by Attribute-Dependency Formulas -- On Computing the Minimal Generator Family for Concept Lattices and Icebergs -- Efficiently Computing a Linear Extension of the Sub-hierarchy of a Concept Lattice -- A Generic Algorithm for Generating Closed Sets of a Binary Relation -- Uncovering and Reducing Hidden Combinatorics in Guigues-Duquenne Bases -- A Parallel Algorithm for Lattice Construction -- Using Intermediate Representation Systems to Interact with Concept Lattices -- Crisply Generated Fuzzy Concepts -- Triadic Concept Graphs and Their Conceptual Contents -- Alpha Galois Lattices: An Overview -- A Finite State Model for On-Line Analytical Processing in Triadic Contexts -- Complete Subalgebras of Semiconcept Algebras and Protoconcept Algebras -- Coherence Networks of Concept Lattices: The Basic Theorem -- Turing Machine Representation in Temporal Concept Analysis -- Protoconceptual Contents and Implications -- Planarity of Lattices -- Bialgebraic Contexts for Distributive Lattices-- Revisited -- Which Concept Lattices Are Pseudocomplemented?.

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### Sommario/riassunto

This volume contains the Proceedings of ICFA 2005, the 3rd International Conference on Formal Concept Analysis. The ICFA conference series aims to be the premier forum for the publication of advances in applied lattice and order theory, and in particular scientific advances related to formal concept analysis. Formal concept analysis is a field of applied mathematics with its mathematical root in order theory, in particular in the theory of complete lattices. Researchers had long been aware of the fact that these fields have many potential applications. Formal concept analysis emerged in the 1980s from efforts to restructure lattice theory to promote better communication between lattice theorists and potential users of lattice theory. The key theme was the mathematization of concept and conceptual hierarchy. Since then, the field has developed into a growing research area in its own right with a thriving theoretical community and an increasing number of applications in data and knowledge processing, including data visualization, information retrieval, machine learning, data analysis and knowledge management. ICFA2005 reflected both practical benefits and progress in the foundational theory of formal concept analysis. Algorithmic aspects were discussed as well as efforts to broaden the field. All regular papers appearing in this volume were refereed by at least two, in most cases three independent reviewers. The final decision to accept the papers was arbitrated by the Program Chairs based on the referee reports. It was the involvement of the Program Committee and the Editorial Board that ensured the scientific quality of these proceedings.

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