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Titolo	Foundations and methods in combinatorial and statistical data analysis and clustering // by Israël César Lerman
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Descrizione fisica	1 online resource (664 p.)
Collana	Advanced Information and Knowledge Processing, , 1610-3947
Disciplina	004
Soggetti	Data mining Statistics Combinatorial analysis Data Mining and Knowledge Discovery Statistics and Computing/Statistics Programs Combinatorics
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface -- On Some Facets of the Partition Set of a Finite Set -- Two Methods of Non-hierarchical Clustering -- Structure and Mathematical Representation of Data -- Ordinal and Metrical Analysis of the Resemblance Notion -- Comparing Attributes by a Probabilistic and Statistical Association I -- Comparing Attributes by a Probabilistic and Statistical Association II -- Comparing Objects or Categories Described by Attributes -- The Notion of "Natural" Class, Tools for its Interpretation. The Classifiability Concept -- Quality Measures in Clustering -- Building a Classification Tree -- Applying the LLA Method to Real Data -- Conclusion and Thoughts for Future Works.
Sommario/riassunto	This book offers an original and broad exploration of the fundamental methods in Clustering and Combinatorial Data Analysis, presenting new formulations and ideas within this very active field. With extensive introductions, formal and mathematical developments and real case studies, this book provides readers with a deeper understanding of the mutual relationships between these methods, which are clearly expressed with respect to three facets: logical, combinatorial and statistical. Using relational mathematical representation, all types of

data structures can be handled in precise and unified ways which the author highlights in three stages: Clustering a set of descriptive attributes Clustering a set of objects or a set of object categories Establishing correspondence between these two dual clusterings Tools for interpreting the reasons of a given cluster or clustering are also included. < Foundations and Methods in Combinatorial and Statistical Data Analysis and Clustering will be a valuable resource for students and researchers who are interested in the areas of Data Analysis, Clustering, Data Mining and Knowledge Discovery.

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