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Descrizione fisica	1 online resource (XII, 232 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 2447
Disciplina	006.4
Soggetti	Database management Artificial intelligence Algorithms Data structures (Computer science) Mathematical statistics Information storage and retrieval Database Management Artificial Intelligence Algorithm Analysis and Problem Complexity Data Structures and Information Theory Probability and Statistics in Computer Science Information Storage and Retrieval
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	General Issues -- Pattern Detection and Discovery -- Detecting Interesting Instances -- Complex Data: Mining Using Patterns -- Determining Hit Rate in Pattern Search -- An Unsupervised Algorithm for Segmenting Categorical Timeseries into Episodes -- If You Can't See the Pattern, Is It There? -- Association Rules -- Dataset Filtering Techniques in Constraint-Based Frequent Pattern Mining -- Concise Representations of Association Rules -- Constraint-Based Discovery and Inductive Queries: Application to Association Rule Mining -- Relational Association Rules: Getting Warmer -- Text and Web Mining

-- Mining Text Data: Special Features and Patterns -- Modelling and Incorporating Background Knowledge in the Web Mining Process -- Modeling Information in Textual Data Combining Labeled and Unlabeled Data -- Discovery of Frequent Word Sequences in Text -- Applications -- Pattern Detection and Discovery: The Case of Music Data Mining -- Discovery of Core Episodes from Sequences -- Patterns of Dependencies in Dynamic Multivariate Data.

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## Sommario/riassunto

The collation of large electronic databases of scientific and commercial information has led to a dramatic growth of interest in methods for discovering structures in such databases. These methods often go under the general name of data mining. One important subdiscipline within data mining is concerned with the identification and detection of anomalous, interesting, unusual, or valuable records or groups of records, which we call patterns. Familiar examples are the detection of fraud in credit-card transactions, of particular coincident purchases in supermarket transactions, of important nucleotide sequences in gene sequence analysis, and of characteristic traces in EEG records. Tools for the detection of such patterns have been developed within the data mining community, but also within other research communities, typically without an awareness that the basic problem was common to many disciplines. This is not unreasonable: each of these disciplines has a large literature of its own, and a literature which is growing rapidly. Keeping up with any one of these is difficult enough, let alone keeping up with others as well, which may in any case be couched in an unfamiliar technical language. But, of course, this means that opportunities are being lost, discoveries relating to the common problem made in one area are not transferred to the other area, and breakthroughs and problem solutions are being rediscovered, or not discovered for a long time, meaning that effort is being wasted and opportunities may be lost.

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