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Soggetti	Data mining Multimedia systems Computer engineering Computer networks Computer vision Application software Database management Data Mining and Knowledge Discovery Multimedia Information Systems Computer Engineering and Networks Computer Vision Computer and Information Systems Applications Database Management
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talk -- Moving Targets -- Bioinformatics Contributions to Data Mining -- Theoretical Aspects of Data Mining -- Bootstrap Feature Selection for Ensemble Classifiers -- Evaluating the Quality of Clustering Algorithms Using Cluster Path Lengths -- Finding Irregularly Shaped Clusters Based on Entropy -- Fuzzy Conceptual Clustering -- Mining Concept Similarities for Heterogeneous Ontologies -- Re-

mining Positive and Negative Association Mining Results -- Multi-Agent Based Clustering: Towards Generic Multi-Agent Data Mining -- Describing Data with the Support Vector Shell in Distributed Environments -- Robust Clustering Using Discriminant Analysis -- New Approach in Data Stream Association Rule Mining Based on Graph Structure -- Multimedia Data Mining -- Fast Training of Neural Networks for Image Compression -- Processing Handwritten Words by Intelligent Use of OCR Results -- Saliency-Based Candidate Inspection Region Extraction in Tape Automated Bonding -- Image Classification Using Histograms and Time Series Analysis: A Study of Age-Related Macular Degeneration Screening in Retinal Image Data -- Entropic Quadrees and Mining Mars Craters -- Hybrid DIAAF/RS: Statistical Textual Feature Selection for Language-Independent Text Classification -- Multimedia Summarization in Law Courts: A Clustering-Based Environment for Browsing and Consulting Judicial Folders -- Comparison of Redundancy and Relevance Measures for Feature Selection in Tissue Classification of CT Images -- Data Mining in Marketing -- Quantile Regression Model for Impact Toughness Estimation -- Mining for Paths in Flow Graphs -- Combining Unsupervised and Supervised Data Mining Techniques for Conducting Customer Portfolio Analysis -- Managing Product Life Cycle with MultiAgent Data Mining System -- Modeling Pricing Strategies Using Game Theory and Support Vector Machines -- Data Mining in Industrial Processes -- Determination of the Fault Quality Variables of a Multivariate Process Using Independent Component Analysis and Support Vector Machine -- Dynamic Pattern Extraction of Parameters in Laser Welding Process -- Trajectory Clustering for Vibration Detection in Aircraft Engines -- Episode Rule-Based Prognosis Applied to Complex Vacuum Pumping Systems Using Vibratory Data -- Predicting Disk Failures with HMM- and HSMM-Based Approaches -- Aircraft Engine Health Monitoring Using Self-Organizing Maps -- Data Mining in Medicine -- Finding Temporal Patterns in Noisy Longitudinal Data: A Study in Diabetic Retinopathy -- Selection of High Risk Patients with Ranked Models Based on the CPL Criterion Functions -- Medical Datasets Analysis: A Constructive Induction Approach -- Data Mining in Agriculture -- Regression Models for Spatial Data: An Example from Precision Agriculture -- Trend Mining in Social Networks: A Study Using a Large Cattle Movement Database -- WebMining -- Spam Email Filtering Using Network-Level Properties -- Domain-Specific Identification of Topics and Trends in the Blogosphere -- Combining Business Process and Data Discovery Techniques for Analyzing and Improving Integrated Care Pathways -- Interest-Determining Web Browser -- Web-Site Boundary Detection -- Data Mining in Finance -- An Application of Element Oriented Analysis Based Credit Scoring -- A Semi-supervised Approach for Reject Inference in Credit Scoring Using SVMs -- Aspects of Data Mining -- Data Mining with Neural Networks and Support Vector Machines Using the R/rminer Tool -- The Orange Customer Analysis Platform -- Semi-supervised Learning for False Alarm Reduction -- Learning from Humanoid Cartoon Designs -- Mining Relationship Associations from Knowledge about Failures Using Ontology and Inference -- Data Mining for Network Performance Monitoring -- Event Prediction in Network Monitoring Systems: Performing Sequential Pattern Mining in Osmius Monitoring Tool -- Selection of Effective Network Parameters in Attacks for Intrusion Detection.

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## Sommario/riassunto

These are the proceedings of the tenth event of the Industrial Conference on Data Mining ICDM held in Berlin ([www.data-mining-forum.de](http://www.data-mining-forum.de)). For this edition the Program Committee received 175

submissions. After the peer-review process, we accepted 49 high-quality papers for oral presentation that are included in this book. The topics range from theoretical aspects of data mining to applications of data mining such as on multimedia data, in marketing, finance and telecommunication, in medicine and agriculture, and in process control, industry and society. Extended versions of selected papers will appear in the international journal Transactions on Machine Learning and Data Mining ([www.ibai-publishing.org/journal/mldm](http://www.ibai-publishing.org/journal/mldm)). Ten papers were selected for poster presentations and are published in the ICDM Poster Proceeding Volume by ibai-publishing ([www.ibai-publishing.org](http://www.ibai-publishing.org)). In conjunction with ICDM four workshops were held on special hot application-oriented topics in data mining: Data Mining in Marketing DMM, Data Mining in LifeScience DMLS, the Workshop on Case-Based Reasoning for Multimedia Data CBR-MD, and the Workshop on Data Mining in Agriculture DMA. The Workshop on Data Mining in Agriculture ran for the first time this year. All workshop papers will be published in the workshop proceedings by ibai-publishing ([www.ibai-publishing.org](http://www.ibai-publishing.org)). Selected papers of CBR-MD will be published in a special issue of the international journal Transactions on Case-Based Reasoning ([www.ibai-publishing.org/journal/cbr](http://www.ibai-publishing.org/journal/cbr)).

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