1. Record Nr. UNISA996465494203316

Titolo	Medical Data Analysis [[electronic resource]] : Third International Symposium, ISMDA 2002, Rome, Italy, October 8-11, 2002, Proceedings / / edited by Alfredo Colosimo, Alessandro Giuliani, Paolo Sirabella
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2002
ISBN	3-540-36104-9
Edizione	[1st ed. 2002.]
Descrizione fisica	1 online resource (X, 230 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2526
Disciplina	610/.7/27
Soggetti	Epidemiology Database management Health informatics Mathematical statistics Information storage and retrieval Artificial intelligence Database Management Health Informatics Probability and Statistics in Computer Science Information Storage and Retrieval Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Data Mining and Decision Support Systems -- Knowledge Discovery Using Medical Data Mining -- Analysis of Stationary Periods of Heart Rate via Symbolic Dynamics -- Microcalcification Detection Using a Kernel Bayes Classifier -- The Use of Classification Trees for Analysis of Kidney Images in Computer Assisted Microscopy -- A Neuro-fuzzy Based Alarm System for Septic Shock Patients with a Comparison to Medical Scores -- Determination of Functional Relationships for Continuous Variables by Using a Multivariable Fractional Polynomial Approach -- Medical Informatics and Modeling -- Nonlinear Oscillation

Models for Spike Separation -- Modeling Glucose-Insulin Behavior in Ill Patients (DM Type2) -- ECG Acquisition and Management System for Knowledge Discovery in Database: Data Modeling, Design, and Implementation -- The Conceptual Basis of WITH, a Collaborative Writer System of Clinical Trials -- Problems of the Model Choice in Classes of Mendelian Inheritance Models -- Computational Modeling of the Cardiovascular System After Fontan Procedure -- Time-Series Analysis -- Short-and Long-Term Statistical Properties of Heartbeat Time-Series in Healthy and Pathological Subjects -- An Index of Organization of the Right Atrium During Atrial Fibrillation: Effects of Internal Cardioversion -- Morphological Analysis of ECG Holter Recordings by Support Vector Machines -- Monitoring of Sleep Apnea in Children Using Pulse Transit Time -- Linear and Nonlinear Evaluation of Ventricular Arrhythmias -- Invariant and Subject-Dependent Features of Otoacoustic Emissions -- Medical Imaging -- Short Term Evaluation of Brain Activities in fMRI Data by Spatiotemporal Independent Component Analysis -- Implementation of an IT System for the Support of a Hospital Infection Surveillance System -- An Artificial Neural Network for 3D Localization of Brainstem Functional Lesions -- Dependent Rendering: Visualizing Multiple Properties of an Object -- Automatic Detection of Microaneurysms in Color Fundus Images of the Human Retina by Means of the Bounding Box Closing.

Sommario/riassunto

The International Symposium on Medical Data Analysis is an important - riodical opportunity to exchange ideas and ?rst-hand experiences with groups interested in the medical applications of innovative hardware and software tools. The massive information available through continuous improvements in the various modeling approaches to Medical Data Analysis is re?ected in the - sults, dealing with quite di? erent topics, presented during the Third Edition of the Symposium (ISMDA 2002). They have been grouped into the following four categories: (1) Data Mining and Decision Support Systems; (2) Medical Informatics and Modeling; (3) Time-Series Analysis; and (4) Medical Imaging. In setting up the symposium program we tried to avoid, even with the sho- age of time, parallel sessions. Thus, all participants had the chance to catch all the oral presentations, and we hope that this third proceedings volume will extend this chance also to non-participants. As for the previous volumes, it c- tains extensive up-to-date chapters on Medical Data Analysis, packed with ideas, suggestions, and solutions to many problems typical of this ?eld.