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Collana	Information Systems and Applications, incl. Internet/Web, and HCI ; ; 6266
Disciplina	005.7
Soggetti	Application software User interfaces (Computer systems) Optical data processing Information storage and retrieval Database management Computer communication systems Information Systems Applications (incl. Internet) User Interfaces and Human Computer Interaction Image Processing and Computer Vision Information Storage and Retrieval Database Management Computer Communication Networks
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Workflow Management and Database -- e-BioFlow: Improving Practical Use of Workflow Systems in Bioinformatics -- MEDCollector: Multisource Epidemic Data Collector -- Epidemic Marketplace: An Information Management System for Epidemiological Data -- Decision Support and Data Management in Biomedicine -- DCM Data Management Framework: A Data Warehousing Approach -- Automatic Classification of Intrapartal Fetal Heart-Rate Recordings – Can It Compete with Experts? -- Clinical Informatics to Diagnose Cardiac

Diseases Based on Data Mining -- Decision Support in Biomedicine (Short Papers) -- The Case-Based Software System for Physician's Decision Support -- SASAgent: An Agent Based Architecture for Search, Retrieval and Composition of e-Science Models and Tools -- Clustering of Protein Substructures for Discovery of a Novel Class of Sequence-Structure Fragments -- A Comorbidity Network Approach to Predict Disease Risk -- Mining and Post-processing of Association Rules in the Atherosclerosis Risk Domain -- Medical Data Modeling and Information Retrieval -- Optimized Column-Oriented Model: A Storage and Search Efficient Representation of Medical Data -- A Semantic Query Interface for the OGO Platform -- BioMedical Information Retrieval: The BioTracer Approach -- Data Mining in Bioinformatics -- A Self-organizing State Space Approach to Inferring Time-Varying Causalities between Regulatory Proteins -- Knowledge Representation and Data Management in Bioinformatics -- Retrieving Samples from Biobanks -- Logical Knowledge Representation of Regulatory Relations in Biomedical Pathways -- Smooth Introduction of Semantic Tagging in Genotyping Procedures -- Biological Data and Signal Processing -- Laboratory Kit for Oscillometry Measurement of Blood Pressure -- Initial Analysis of the EEG Signal Processing Methods for Studying Correlations between Muscle and Brain Activity -- Highlighting the Current Issues with Pride Suggestions for Improving the Performance of Real Time Cardiac Health Monitoring.

Sommario/riassunto

Biomedical engineering and medical informatics are challenging and rapidly growing areas. Applications of information technology in these areas are of paramount imp- tance. The aim of the first ITBAM conference was to bring together scientists, - searchers and practitioners from different disciplines (mathematics, bioinformatics, biology, medicine, biomedical engineering and computer science) having such c- mon interests. We hope that ITBAM conferences will provide opportunities for fru- ful discussions between all attendees and provide a platform where participants can exchange their most recent results, identify future directions and challenges, initiate possible collaborative research and system development, and develop common l- guages for solving problems in the realm of biomedical engineering, bioinformatics and medical informatics. The importance of computer-aided diagnosis and therapy has drawn more and more attention worldwide and laid the foundation for modern medicine with excellent potential for promising applications such as telemedicine, Web-based healthcare and analysis of genetic information. For this conference, after a peer-review process, we finally selected 13 long papers and 8 short papers that are now published in this volume. They are divided in to the following groups: workflow management and database; decision support and data management in biomedicine; medical data modelling and information retrieval; data mining in bioinformatics; knowledge representation and data management in bio- formatics; biological data and signal processing. The papers show how broad the spectrum of topics in applications of information technology to biomedical engine- ing and medical informatics is.