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Collana	Lecture Notes in Artificial Intelligence ; ; 934
Disciplina	610
Soggetti	Medicine Artificial intelligence Application software Optical data processing Bioinformatics Computational biology Biomedicine, general Artificial Intelligence Information Systems Applications (incl. Internet) Image Processing and Computer Vision Computer Appl. in Life Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	A component-based architecture for automation of protocol-directed therapy -- Coordinating taxonomies: Key to re-usable concept representations -- Generating personalised patient information using the medical record -- Analysis of medical jargon: The RECIT system -- Medical knowledge representation for medical report analysis -- Modelling medical concepts as time-objects -- Modeling medical reasoning with the Event Calculus: an application to the management of mechanical ventilation -- A general framework for building patient monitoring systems -- Semi-qualitative models and simulation for biomedical applications -- Generating explanations of

pathophysiological system behaviors from qualitative simulation of compartmental models -- An information-based bayesian approach to history taking -- Medical decision making using Ignorant Influence Diagrams -- Dynamic propagation in causal probabilistic networks with instantiated variables -- Alerts as starting point for hospital infection surveillance and control -- Cooperative software agents for patient management -- High level control strategies for diabetes therapy -- Therapy planning using qualitative trend descriptions -- Adaptation and abstraction in a case-based antibiotics therapy adviser -- Field evaluations of a knowledge-based system for peripheral blood interpretation -- Functional evaluation of SETH: An expert system in clinical toxicology -- Evaluating a neural network decision-support tool for the diagnosis of breast cancer -- Knowledge-based systems for lymph node pathology: A comparison of two approaches -- Mapping laboratory medicine onto the select and test model to facilitate knowledge-based report generation in laboratory medicine -- Machine learning techniques applied to the diagnosis of acute abdominal pain -- Reflections on building medical decision support systems and corresponding implementation in diagnostics shell D3 -- Decision models for cost-effectiveness analysis: a means for knowledge sharing and quality control in health care multidisciplinary tasks -- Model-based application: The Galen structured clinical user interface -- A knowledge-based modelling of hospital information systems components -- Use of a conceptual semi-automatic ICD-9 encoding system in an hospital environment -- Quality assurance and increased efficiency in medical projects with neural networks by using a structured development method for feedforward neural networks (SENN) -- A prototype neural network decision-support tool for the early diagnosis of acute myocardial infarction -- Integration of neural networks and rule based systems in the interpretation of liver biopsy images -- A cooperative and adaptive approach to medical image segmentation -- COBRA: Integration of knowledge-bases with case-databases in the domain of congenital malformation -- Case-based medical multi-expertise: an example in psychiatry -- TIME-NESIS: A data model in managing time granularity of natural-language clinical information -- Induction of expert system rules from databases based on rough set theory and resampling methods -- Sequential knowledge acquisition: Combining models and cases -- Medical fuzzy expert systems and reasoning about beliefs -- Diagnosis of human acid-base balance states via combined pattern recognition for Markov chains -- Intelligence formation problems in children at an early age applying new computer technologies under conditions of rehabilitation center -- Telecardiology -- Modelling a sharable medical concept system: Ontological foundation in GALEN -- A graph-based approach to the structural analysis of proliferative breast lesions. -- A workstation for clinical decision support in a local area network for cardiology -- Knowledge-based education tool to improve quality in diabetes care -- NEPHARM: A pharmacokinetic database for adjusting drug dosage to impaired renal function -- A hybrid architecture for knowledge-based systems -- Representing medical context using rule-based object-oriented programming techniques -- Integration of Neural Networks and knowledge-based systems in medicine -- Generated critic in the knowledge based neurology trainer -- An approach to analysis of qualitative data with insufficient number of quantization levels -- Inductively learned rule for breast cancer domain with improved interobserver reproducibility -- Development and evaluation of a knowledge-based system to support ventilator therapy management -- A neural support to the prognostic evaluation of Cardiac Surgery --

DECISion-support system for radiological diagnostic -- A preliminary investigation into the analysis of electromyographic activity using a system of multiple neural networks -- Knowledge-based system to predict the effect of pregnancy on progression of diabetic retinopathy -- A software to evaluate multislices radiotherapic treatment planning -- TKR-tool: An expert system for Total Knee Replacement management.

Sommario/riassunto

This volume presents the proceedings of the 5th Conference on Artificial Intelligence in Medicine Europe, AIME '95, held in Pavia, Italy in June 1995. The volume contains 32 full refereed selected papers contributed by researchers and professionals coming from computer science departments, medical informatics departments, and hospitals; in addition there are the keynote address and 28 poster presentations. The volume is organized in topical sections on medical records, temporal reasoning and simulation, probabilistic models, patient management and therapy planning, evaluation of knowledge-based systems, diagnostic support systems, models for clinical information systems, and neural networks and image interpretation.