Record Nr. UNINA9910143594603321 Artificial Intelligence in Medicine: 8th Conference on Artificial **Titolo** Intelligence in Medicine in Europe, AIME 2001 Cascais, Portugal, July 1-4, 2001, Proceedings / / edited by Silvana Quaglini, Pedro Barahona, Steen Andreassen Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2001 3-540-48229-6 **ISBN** Edizione [1st ed. 2001.] Descrizione fisica 1 online resource (XIV, 469 p.) Collana Lecture Notes in Artificial Intelligence;; 2101 Disciplina 610/.285/63 Soggetti Artificial intelligence Medicine Optical data processing Information storage and retrieval Application software Medical informatics Artificial Intelligence Biomedicine, general Image Processing and Computer Vision Information Storage and Retrieval Information Systems Applications (incl. Internet) **Health Informatics** 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 Mediated Agent Interaction -- On Articulation and Localization - Some Sociotechnical Issues of Design, Implementation, and Evaluation of Knowledge Based Systems -- Prototype Selection and Feature Subset Selection by Estimation of Distribution Algorithms. A Case Study in the Survival of Cirrhotic Patients Treated with TIPS -- Detection of Infectious Outbreaks in Hospitals through Incremental Clustering --Mining Data from a Knowledge Management Perspective: An Application to Outcome Prediction in Patients with Resectable

Hepatocellular Carcinoma -- Discovering Associations in Clinical Data: Application to Search for Prognostic Factors in Hodgkin's Disease --Visualisation of Multidimensional Data for Medical Decision Support --A clustering-based constructive induction method and its application to rheumatoid arthritis -- Improving Identification of Difficult Small Classes by Balancing Class Distribution -- Credal Classification for Dementia Screening -- Evaluation of Prognostic Factors and Prediction of Chronic Wound Healing Rate by Machine Learning Tools -- Making Reliable Diagnoses with Machine Learning: A Case Study -- A Classification-Tree Hybrid Method for Studying Prognostic Models in Intensive Care -- Combining Unsupervised and Supervised Machine Learning in Analysis of the CHD Patient Database -- Coronary Heart Disease Patient Models Based on Inductive Machine Learning --Prediction of Protein Secondary Structures of All Types Using New Hypersphere Machine Learning Method -- Integrating Different Methodologies for Insulin Therapy Support in Type 1 Diabetic Patients -- Diagnosing Patient State in Intensive Care Patients Using the Intelligent Ventilator (INVENT) System -- A User Interface for Executing Asbru Plans -- Improving HISYS1 with a Decision Support System --Diagnosis of Iron-Deficiency Anemia in Hemodialyzed Patients through Support Vector Machines Technique -- A Visual Tool for a User-Friendly Artificial Neural Network Based Decision Support System in Medicine -- Modeling of Ventricular Repolarisation Time Series by Multi-Layer Perceptrons -- Expert Knowledge and Its Role in Learning Bayesian Networks in Medicine: An Appraisal -- Improving the Diagnostic Performance of MUNIN by Remodelling of the Diseases --Extended Bayesian Regression Models: A Symbiotic Application of Belief Networks and Multilayer Perceptrons for the Classification of Ovarian Tumors -- The Effects of Disregarding Test Characteristics in Probabilistic Networks -- Knowledge Acquisition and Automated Generation of Bayesian Networks for a Medical Dialogue and Advisory System -- Educational Tool for Diabetic Patients Based on Causal Probabilistic Networks -- NasoNet, Joining Bayesian Networks, and Time to Model Nasopharyngeal Cancer Spread -- Using time-oriented data abstraction methods to optimize oxygen supply for neonates --Visual Definition of Temporal Clinical Abstractions: A User Interface Based on Novel Metaphors -- Using Temporal Probabilistic Knowledge for Medical Decision Making -- Temporal Issues in the Intelligent Interpretation of the Sleep Apnea Syndrome -- Generating Symbolic and Natural Language Partial Solutions for Inclusion in Medical Plans --Using Part-of-Speech and Word-Sense Disambiguation for Boosting String-Edit Distance Spelling Correction -- Semantic Interpretation of Medical Language - Quantitative Analysis and Qualitative Yield --Medical Knowledge Acquisition from the Electronic Encyclopedia of China -- Quantitative and Qualitative Approaches to Reasoning Under Uncertainty in Medical Decision Making -- Comparison of Rule-Based and Bayesian Network Approaches in Medical Diagnostic Systems --Parts, Locations, and Holes — Formal Reasoning about Anatomical Structures -- Abductive Inference of Genetic Networks -- Interface of Inference Models with Concept and Medical Record Models --Integrating Ripple Down Rules with Ontologies in an Oncology Domain -- Towards a Simple Ontology Definition Language (SOntoDL) for a Semantic Web of Evidence-Based Medical Information -- Knowledge Acquisition System to Support Low Vision Consultation -- Systematic Construction of Texture Features for Hashimoto's Lymphocytic Thyroiditis Recognition from Sonographic Images -- Dynamic Adaptation of Cooperative Agents for MRI Brain Scans Segmentation --Numeric and Symbolic Knowledge Representation of Cortex Anatomy

Using Web Technologies -- Depth-Four Threshold Circuits for Computer-Assisted X-ray Diagnosis -- Management of Hospital Teams for Organ Transplants Using Multi-Agent Systems -- An Al-Based Approach to Support Communication in Health Care Organizations --TAME Time Resourcing in Academic Medical Environments -- A Conceptual Framework to Model Chronic and Long-Term Diseases --Modelling of Radiological Examinations with POKMAT, a Process Oriented Knowledge Management Tool -- A Multi-Agent System for Organ Transplant Co-ordination -- A Platform Integrating Knowledge and Data Management for EMG Studies -- Using ONCODOC as a Computer-Based Eligibility Screening System to Improve Accrual onto Breast Cancer Clinical Trials -- Using Critiquing for Improving Medical Protocols: Harder than It Seems -- Evaluating the Impact of Clinical Practice Guidelines on Stroke Outcomes -- Challenges in Evaluating Complex Decision Support Systems: Lessons from Design-a-Trial --On the Evaluation of Probabilistic Networks -- Evaluation of a Case-Based Antibiotics Therapy Adviser.

Sommario/riassunto

This book constitutes the refereed proceedings of the 8th Conference on Artificial Intelligence in Medicine in Europe, AIME 2001, held in Cascais, Portugal in July 2001. The 31 revised full papers presented together with 30 posters and two invited papers were carefully reviewed and selected from 79 submissions. Among the topics addressed in their context on medical information processing are knowledge management, machine learning, data mining, decision support systems, temporal reasoning, case-based reasoning, planning and scheduling, natural language processing, computer vision, image and signal interpretation, intelligent agents, telemedicine, careflow systems, and cognitive modeling.