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Titolo	Social Intelligence : The New Frontier of Integrating Human Intelligence and Artificial Intelligence in Social Space / / by Dong Wang, Lanyu Shang, Yang Zhang
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Altri autori (Persone)	ShangLanyu ZhangYang
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Nota di contenuto	Chapter 1: Introduction -- 1.1 Overview -- 1.2 Motivation and Challenges -- 1.3 Contributions -- Chapter 2: Social Intelligence Applications and Backgrounds -- 2.1 Social Intelligence: the emergence of human intelligence and AI -- 2.2 Enabling Technologies for Social Intelligence -- 2.3 Interdisciplinary Nature of Social Intelligence -- 2.4 Emerging Social Intelligence Applications -- Chapter 3: Data Heterogeneity -- 3.1 The Data Heterogeneity Problem in Social Intelligence -- 3.2 A Multimodal Approach: DuoGen and ContrastFaux -- 3.4 Real-world Case Studies -- 3.5 Discussion -- Chapter 4: Data Sparsity and Model Generality -- 4.1 The Data Sparsity and Model Generality Problem in Social Intelligence -- 4.2 Robust and General Social Intelligence: CrowdAdapt and CollabGeneral -- 4.3 Real-world Case Studies -- 4.4 Discussion -- Chapter 5: Explainable AI (XAI) in Social Intelligence -- 4.1 A Collaborative Explanation for AI -- 4.2 Social XAI: CrowdGraph and CEA-COVID -- 4.3 Real-world Case Studies

-- 4.4 Discussion -- Chapter 6: Fusing Crowd Wisdom and AI -- 6.1 Integrating Crowd-based Human Intelligence and AI -- 6.2 A Crowd-AI Co-Design: CrowdNAS and CrowdHPO -- 6.4 Real-world Case Studies -- 6.5 Discussion -- Chapter 7: Fairness and Bias Issue -- 7.1 The Fairness and Bias Issue in Social Intelligence -- 7.2 Fair Social AI Solution: FairCrowd and DebiasEdu -- 7.3 Real-world Case Studies -- 7.4 Discussion -- Chapter 8: Privacy Issue -- 8.1 Understanding Privacy in Social Intelligence -- 8.2 Privacy-aware Crowd-AI Approach: CoviDKG and FaceCrowd -- 8.3 Real-world Case Studies -- 8.4 Discussion -- Chapter 9: Further Readings -- 9.1 Human-centered AI -- 9.2 AI for Social Good -- 9.3 Fairness and Privacy in Social Intelligence -- 9.4 Ethics and Policies in Social Intelligence -- Chapter 10: Conclusions and Remaining Challenges.

Sommario/riassunto

Given the rise of AI and the advent of online collaboration opportunities (e.g., social media, crowdsourcing), emerging research has started to investigate the integration of AI and human intelligence, especially in a collaborative social context. This creates unprecedented challenges and opportunities in the field of Social Intelligence (SI), where the goal is to explore the collective intelligence of both humans and machines by understanding their complementary strengths and interactions in the social space. In this book, a set of novel human-centered AI techniques are presented to address the challenges of social intelligence applications, including multimodal approaches, robust and generalizable frameworks, and socially empowered explainable AI designs. The book then presents several human-AI collaborative learning frameworks that jointly integrate the strengths of crowd wisdom and AI to address the limitations inherent in standalone solutions. The book also emphasizes pressing societal issues in the realm of social intelligence, such as fairness, bias, and privacy. Real-world case studies from different applications in social intelligence are presented to demonstrate the effectiveness of the proposed solutions in achieving substantial performance gains in various aspects, such as prediction accuracy, model generalizability and explainability, algorithmic fairness, and system robustness.

2. Record Nr. UNINA9910483017803321

Titolo	Data Warehousing and Knowledge Discovery : 8th International Conference, DaWaK 2006, Krakow, Poland, September 4-8, 2006, Proceedings / / edited by A Min Tjoa
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Collana	Information Systems and Applications, incl. Internet/Web, and HCI, , 2946-1642 ; ; 4081
Altri autori (Persone)	TjoaA Min TrujilloJuan
Disciplina	005.74
Soggetti	Data structures (Computer science) Information theory Database management Information storage and retrieval systems Application software Computer networks Artificial intelligence Data Structures and Information Theory Database Management Information Storage and Retrieval Computer and Information Systems Applications Computer Communication Networks 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 and index.
Nota di contenuto	ETL Processing -- ETLDiff: A Semi-automatic Framework for Regression Test of ETL Software -- Applying Transformations to Model Driven Data Warehouses -- Bulk Loading a Linear Hash File -- Materialized View -- Dynamic View Selection for OLAP -- Preview: Optimizing View Materialization Cost in Spatial Data Warehouses -- Preprocessing for Fast Refreshing Materialized Views in DB2 -- Multidimensional Design

-- A Multiversion-Based Multidimensional Model -- Towards Multidimensional Requirement Design -- Multidimensional Design by Examples -- OLAP and Multidimensional Model -- Extending Visual OLAP for Handling Irregular Dimensional Hierarchies -- A Hierarchy-Driven Compression Technique for Advanced OLAP Visualization of Multidimensional Data Cubes -- Analysing Multi-dimensional Data Across Autonomous Data Warehouses -- What Time Is It in the Data Warehouse? -- Cubes Processing -- Computing Iceberg Quotient Cubes with Bounding -- An Effective Algorithm to Extract Dense Sub-cubes from a Large Sparse Cube -- On the Computation of Maximal-Correlated Cuboids Cells -- Data Warehouse Applications -- Warehousing Dynamic XML Documents -- Integrating Different Grain Levels in a Medical Data Warehouse Federation -- A Versioning Management Model for Ontology-Based Data Warehouses -- Data Warehouses in Grids with High QoS -- Mining Techniques (1) -- Mining Direct Marketing Data by Ensembles of Weak Learners and Rough Set Methods -- Efficient Mining of Dissociation Rules -- Optimized Rule Mining Through a Unified Framework for Interestingness Measures -- An Information-Theoretic Framework for Process Structure and Data Mining -- Mining Techniques (2) -- Mixed Decision Trees: An Evolutionary Approach -- ITER: An Algorithm for Predictive Regression Rule Extraction -- COBRA: Closed Sequential Pattern Mining Using Bi-phase Reduction Approach -- Frequent Itemsets -- A Greedy Approach to Concurrent Processing of Frequent Itemset Queries -- Two New Techniques for Hiding Sensitive Itemsets and Their Empirical Evaluation -- EStream: Online Mining of Frequent Sets with Precise Error Guarantee -- Mining Data Streams -- Granularity Adaptive Density Estimation and on Demand Clustering of Concept-Drifting Data Streams -- Classification of Hidden Network Streams -- Adaptive Load Shedding for Mining Frequent Patterns from Data Streams -- An Approximate Approach for Mining Recently Frequent Itemsets from Data Streams -- Ontology-Based Mining -- Learning Classifiers from Distributed, Ontology-Extended Data Sources -- A Coherent Biomedical Literature Clustering and Summarization Approach Through Ontology-Enriched Graphical Representations -- Automatic Extraction for Creating a Lexical Repository of Abbreviations in the Biomedical Literature -- Clustering -- Priority-Based k-Anonymity Accomplished by Weighted Generalisation Structures -- Achieving k-Anonymity by Clustering in Attribute Hierarchical Structures -- Calculation of Density-Based Clustering Parameters Supported with Distributed Processing -- Cluster-Based Sampling Approaches to Imbalanced Data Distributions -- Advanced Mining Techniques -- Efficient Mining of Large Maximal Bicliques -- Automatic Image Annotation by Mining the Web -- Privacy Preserving Spatio-Temporal Clustering on Horizontally Partitioned Data -- Association Rules -- Discovering Semantic Sibling Associations from Web Documents with XTREEM-SP -- Difference Detection Between Two Contrast Sets -- EGEA : A New Hybrid Approach Towards Extracting Reduced Generic Association Rule Set (Application to AML Blood Cancer Therapy) -- Miscellaneous Applications -- AISS: An Index for Non-timestamped Set Subsequence Queries -- A Method for Feature Selection on Microarray Data Using Support Vector Machine -- Providing Persistence for Sensor Data Streams by Remote WAL -- Classification -- Support Vector Machine Approach for Fast Classification -- Document Representations for Classification of Short Web-Page Descriptions -- GARC: A New Associative Classification Approach -- Conceptual Modeling for Classification Mining in Data Warehouses.

Sommario/riassunto

For more than a decade, data warehousing together with knowledge

discovery technology have made up the key technology for the decision-making process in companies. Since 1999, due to the relevant role of these technologies in academia and industry, the Data Warehousing and Knowledge Discovery (DaWaK) conference series has become an international forum for both practitioners and researchers to share their findings, publish their relevant results and debate in depth research issues and experiences on data warehousing and knowledge discovery systems and applications. th The 8 International Conference on Data Warehousing and Knowledge Discovery (DaWaK 2006) continued the series of successful conferences dedicated to these topics. In this edition, DaWaK aimed at providing the right and logical balance between data warehousing and knowledge discovery. In data warehousing the papers cover different research problems, such as advanced techniques in OLAP visuali- tion and multidimensional modelling, innovation of ETL processes and integration problems, materialized view optimization, very large data warehouse processing, data warehouses and data mining applications integration, data warehousing for real-life applications, e. g. , medical applications and spatial applications. In data mining and knowledge discovery, papers are focused on a variety of topics from data streams analysis and mining, ontology-based mining techniques, mining frequent item sets, clustering, association and classification, patterns and so on. These proceedings contain the technical papers which were selected for presentation at the conference. We received 198 abstracts, and finally received 146 papers from 36 countries.