Record Nr. UNINA9910464523403321 Multimedia information extraction and digital heritage preservation **Titolo** [[electronic resource] /] / editors, Usha Mujoo Munshi, Bidyut Baran Chaudhuri; series editor, Sankar K. Pal Singapore,: World Scientific, 2011 Pubbl/distr/stampa **ISBN** 1-283-23469-6 9786613234698 981-4307-26-2 Descrizione fisica 1 online resource (413 p.) Collana Statistical science and interdisciplinary research, , 1793-6195;; v. 10 Platinum jubilee series Altri autori (Persone) MunshiUsha Mujoo ChaudhuriB. B (Bidyut Baran) PalSankar K Disciplina 006.312 025.84 Soggetti Genealogy Digital preservation - India Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Foreword; Preface; Contents; 1. Motivating Ontology-Driven Information Extraction Burcu Yildiz and Silvia Miksch; Abstract; 1.1 Introduction; 1.2 Information Extraction; 1.3 Related Work; 1.4 Ontology-driven Information Extraction Systems; 1.4.1 System Architecture: 1.4.2 The Ontology Management Module (OMM): 1.4.2.1 Ontology Learning and Population; 1.4.2.2 Ontology Integration; 1.4.2.3 Ontology Evolution; 1.4.3 Rule Generation Module; 1.4.4 The Extraction Module: 1.5 Conclusion and Future Work: References 2. Ontology Based Access of Heritage Artifacts on the Web Santanu Chaudhury and Hiranmay GhoshAbstract; 2.1 Introduction; 2.2 Ontology for Multimedia: 2.3 Construction of Multimedia Ontology: 2.4 Concept Recognition using Multimedia Ontology; 2.5 Distributed

Architecture for Digital Heritage Library; 2.6 Application Examples; Heritage +; 2.7 Contextual Advertising in Heritage Libraries;

2.8 Conclusion; References; 3. Semantic Integration of Classical and Digital Libraries S. Thaddeus, A. Jeganathan, Gracy T. Leema; Abstract; 3.1 Introduction; 3.2 Motivation

3.3 Overview of Semantic Technology3.4 Resource Ontology; 3.5 Solution Architecture; 3.6 Related Works; 3.7 Conclusion; References; Appendix; 4. Low-level Visual Features with Semantics-based Image Retrieval V.P. Subramanyam Rallabandi; Abstract; 4.1 Introduction; 4.2 General Concepts of Content-Based Image Retrieval; 4.2.1 Query by Picture Example: 4.2.2 Relevance Feedback: 4.2.3 Multi-feature Indexing: 4.2.4 High-level Semantics-based Image Retrieval: 4.3 Proposed Image Retrieval System; 4.3.1 R-Tree Structure SOM; 4.3.2 Self-organizing Relevance Feedback: 4.4 Low-level Visual Descriptors 4.4.1 Color Feature Descriptors4.4.2 Texture Feature Descriptors; 4.4.3 Shape Feature Descriptors; 4.4.4 Iconic Image Analysis; 4.5. Semantic Analysis of Images: 4.5.1 Semantic Reasoning and Contextual Knowledge; 4.5.2 Analysis and Detection; 4.5.3 Reducing the Semantic Gap; 4.5.4 Evaluation of Semantic Reasoning Approach; 4.5.5 Image Retrieval using Semantic Content; 4.6 Experimental Results and Discussion; 4.6.1 Image Database; 4.6.2 Results and Discussion; 4.7 Conclusion; References

5. Narrowing the Semantic Gap in Image Retrieval: A Multimodal Approach William I. Grosky and Rajeev AgrawalAbstract; 5.1 Introduction; 5.2 Multimodal Image Representation and Retrieval; 5.2.1 Representing Image Data; 5.2.2 Taking the Advantage of Modalities; 5.2.3 Modality Fusion Techniques; 5.2.4 Closing the Gap Using Various Image Features; 5.2.5 Approaches to Efficient Image Retrieval; 5.3 Dimensionality Reduction Techniques; 5.3.1 The Curse of Dimensionality; 5.3.1.1 The Problems Caused by High Dimensionality; 5.3.1.2 Overcoming the Curse; 5.3.2 Dimensionality Reduction Techniques

5.4 A Framework for Multimodal-Based Image Retrieval

Sommario/riassunto

Multimedia Information Extraction and Digital Heritage Preservation is an edited volume of contributions by various distinguished researchers on issues in digital libraries, particularly in connection with heritage documents. This excellent collection of 21 papers covers various aspects of the problem. Cultural and scientific heritage resources are of fundamental value for human civilization, and their preservation is of utmost importance to mankind. Such preservation work has two aspects. First, the preservation of original objects and documents at source or in museums, and two, preservation