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Appendix E XML Schema for FUSION; 4 A Fuzzy Knowledge-Based System for Multimedia Applications; 4.1 Introduction
4.2 Knowledge Base Formalization4.3 Fuzzy Propositional Rules Inference Engine; 4.4 Demonstration; 4.5 Conclusion and Future Work; References; Part Two: Multimedia Content Analysis; 5 Structure Identification in an Audiovisual Document; 5.1 Introduction; 5.2 Shot Segmentation; 5.3 Evaluation of Shot-Segmentation Algorithms; 5.4 Formal Description of the Video Editing Work; 5.5 Macrosegmentation; 5.6 Conclusion; 5.7 Acknowledgement; References; 6 Object-Based Video Indexing; 6.1 Introduction; 6.2 MPEG-7 as a Normalized Framework for Object-Based Indexing of Video Content
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8.2 Modelling Concepts: Support Vector Machines for Multiject Models8.3 Modelling Context: A Graphical Multinet Model for Learning and Enforcing Context; 8.4 Experimental Set-up and Results; 8.5 Concluding Remarks; Acknowledgement; References; 9 Machine Learning in Multimedia; 9.1 Introduction; 9.2 Graphical Models and Multimedia Understanding; 9.3 Learning Classifiers with Labelled and Unlabelled Data; 9.4 Examples of Graphical Models for Multimedia Understanding and Computer Vision; 9.5 Conclusions; References; Part Three: Multimedia Content Management Systems and the Semantic Web 10 Semantic Web Applications

Sommario/riassunto

The emerging idea of the semantic web is based on the maximum automation of the complete knowledge lifecycle processes: knowledge representation, acquisition, adaptation, reasoning, sharing and use. Text-based based browsers involve a costly information-retrieval process: descriptions are inherently subjective and usage is often confined to the specific application domain for which the descriptions were created. Automatic extracted audiovisual features are, in general, more objective, domain-independent and can be native to the audiovisual content. This book seeks to draw together in one c