Gate to Computer Science and Research Vol. 4

Multimedia Retrieval

Perspectives and Challenges

Edited by Subrahmanyam Murala
Santosh Kumar Vipparthi

Science Gate Publishing

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Preface

This book presents various algorithms used for implementation of multimedia retrieval. The main advantage of this book is different recent feature extraction techniques elaborately given.

Why should I care about multimedia retrieval?
Recent years are characterized by a massive multimedia data (text, image, video, sounds) generated, stored, and retrieved in large databases. The evolution of the internet and social networks have caused the tremendous increase of the amount of everyday life images and videos, music files and text data that are processed by the modern information systems. The task of multimedia data retrieval constitutes one of the hottest topics in computer science; therefore, there is a need for reliable systems able to retrieve the stored data accurately and in real time. Scientists all over the world are trying to develop novel algorithms to index, describe, match, compare the multimedia content and to implement new system architectures that guarantee high reliability and low response time.

Who should read this book?
This book was written for the professional and the student. This book assumes some mathematical maturity, basic concepts of image processing about the reader. This book also assumes that the reader has some background in coding. However, it is possible for the reader to understand the high-level concepts. The researchers and students who are working and studying in the field of image and video retrieval, pattern reorganization applications etc. can refer to this book.

What chapters do I need to read?
This book contains 4 chapters. Several of them are self-contained. Some are needed in order to provide a foundation of image processing.

Chapter 1 provides *"An Expert Local Mesh Correlation Histograms for Biomedical Image Indexing and Retrieval"* for biomedical applications.

Chapter 2 presents *"Constructing Synthesized Sheets by Mining Scientific Research Papers"* for the biological domain.

Chapter 3 explains the *"Topic Correlations for Cross-Modal Multimedia Information Retrieval"*.

Chapter 4 presents the *"Performance Evaluation of Error Diffusion Block Truncation Coding Feature for Color Image Retrieval"*.

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