Recent advances in computing and communications are leading to the creation of large-scale databases of visual and multimedia information. Such databases are finding ready applications in a wide range of fields such as advertising and marketing, education and training, entertainment, medicine, and remote sensing. Because of the very nature of visual and multimedia data, new and innovative methods are called for in modeling, processing, organizing, and indexing of this data for efficient storage, management, access, and delivery of the content. The goal of this special section is to highlight the new research areas and explore technology frontiers, by soliciting and selecting quality papers addressing issues from various aspects of storage, search, retrieval, and processing of digital media data (video/image/audio) and across a wide range of research disciplines.

For this special section, we have solicited papers in relevant areas, ranging from content capture and processing, database management, new results on similarity measures and semantic features, and query methods to multimedia systems embracing leading-edge technology, and special applications of media management, retrieval, and processing across multiple fields, from consumer media systems, digital libraries, and media imaging to remote sensing. We encouraged the authors of some very promising papers in the SPIE/IS&T Electronic Imaging Symposium (San Jose) 2001 Conference on Storage and Retrieval of Media Databases to submit a full journal-quality version of their conference manuscript to this special section. We also received submissions from outside of the conference, in response to our general call for papers. All submitted papers have undergone multiple peer-reviews, and we accepted 12 papers after two rounds of revisions and follow-up reviews.

We have classified the 12 papers into four major categories: (A) Content-based Image Retrieval (the first two papers), (B) Content-based Video Retrieval (the next four papers), (C) Video Categorization and Summarization (the following three papers), and (D) Systems and Applications (the last three papers).

We would like to thank all those who have contributed significant time and effort to make this special section what it is today—the authors, JEI editor Jan Allebach, JEI staff members, and our reviewers, in addition to the efforts of the guest editors. This was a tremendous accomplishment given the tight deadlines we had to meet.

We hope you will enjoy the papers.
Chung-Sheng, Rainer, and Boon-Lock, who helped to pull the papers and the issue together in such a short period of time!

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