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Front Matter: Volume 6833

, "Front Matter: Volume 6833," Proc. SPIE 6833, Electronic Imaging and
Multimedia Technology V, 683301 (26 February 2008); doi:
10.1117/12.784618

SPIE.

Event: Photonics Asia 2007, 2007, Beijing, China

PROCEEDINGS OF SPIE

Electronic Imaging and Multimedia Technology V

**Liwei Zhou
Chung-Sheng Li
Minerva M. Yeung**
Editors

**12–15 November 2007
Beijing, China**

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SPIE

Part One of Two Parts

Volume 6833

Proceedings of SPIE, 0277-786X, v. 6833

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Please use the following format to cite material from this book:

Author(s), "Title of Paper," in *Electronic Imaging and Multimedia Technology V*, edited by Liwei Zhou, Chung-Sheng Li, Minerva M. Yeung, Proceedings of SPIE Vol. 6833 (SPIE, Bellingham, WA, 2007) Article CID Number.

ISSN 0277-786X

ISBN 9780819470089

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445

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- 2 Image Processing I
Xiang Peng, Shenzhen University (China) and Tianjin University (China)
- 3 Image Processing II
Kecong Ai, Xi'an Institute of Applied Optics (China)
- 4 Target Detection and Image Registration
Yangqiu Li, Beijing Institute of Technology (China)
- 5 Image Recognition and Fusion
Xiang Peng, Shenzhen University (China) and Tianjin University (China)
- 6 Color Image Processing and Coding
Kecong Ai, Xi'an Institute of Applied Optics (China)

Introduction

Eleven years ago, in 1996, the Conference on Electronic Imaging and Multimedia Systems was added to Photonics Asia Symposium, which is sponsored by the Chinese Optical Society and SPIE. The purpose of this new conference was to provide a forum where participants could disseminate and exchange ideas and present up-to-date comprehensive assessments of progress and developments in the field of electronic imaging and multimedia systems. To this end, it is very gratifying to us that we have been assembled here five times for an informative exchange of opinions.

The Conference on Electronic Imaging and Multimedia Systems focuses on new and exciting topics such as optoelectronic imaging, image analysis, computer vision and pattern recognition, including image acquisition, computer software, algorithms, digital techniques, and applications illustrating the core technologies spanning this increasingly diverse field of research.

Through advances in photonics, optoelectronics, and computing that have taken place during the last 11 years, we found that the electronic imaging and multimedia technologies have created new and interesting technical possibilities in a wide range of fields, such as medicine and healthcare, defense and aerospace, environment, entertainment, commerce, and public safety. This, in turn, has promoted development of technologies necessary for affordable imaging and visualization systems.

Collected in this Volume 6833 of the SPIE proceedings are 103 papers accepted for presentation at the conference. Papers included in these proceedings fall into the following topics: optoelectronic imaging systems; sensors, cameras, and systems for industrial/scientific applications; image quality and system performance; 3D image acquisition and generation techniques; stereoscopic displays and applications; video analysis and processing; image data communication; real-time image processing; visualization and data analysis; visual communications; security and measurement of multimedia content; target detection and tracking; feature extraction, image recognition and classification, image registration and matching, image restoration and segmentation, image fusion, algorithms and systems; machine vision applications; and color imaging processing and applications. These proceedings will no doubt benefit not only the participants of this meeting but also our colleagues engaged in relevant research and development.

In closing, we would like to heartily thank all of the authors for their contributions to the conference and this volume of proceedings, and all of the participants and friends for their interest and efforts in helping us to make this meeting possible.

Liwei Zhou
Chung-Sheng Li
Minerva M. Yeung