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# Computer Vision and Image Processing

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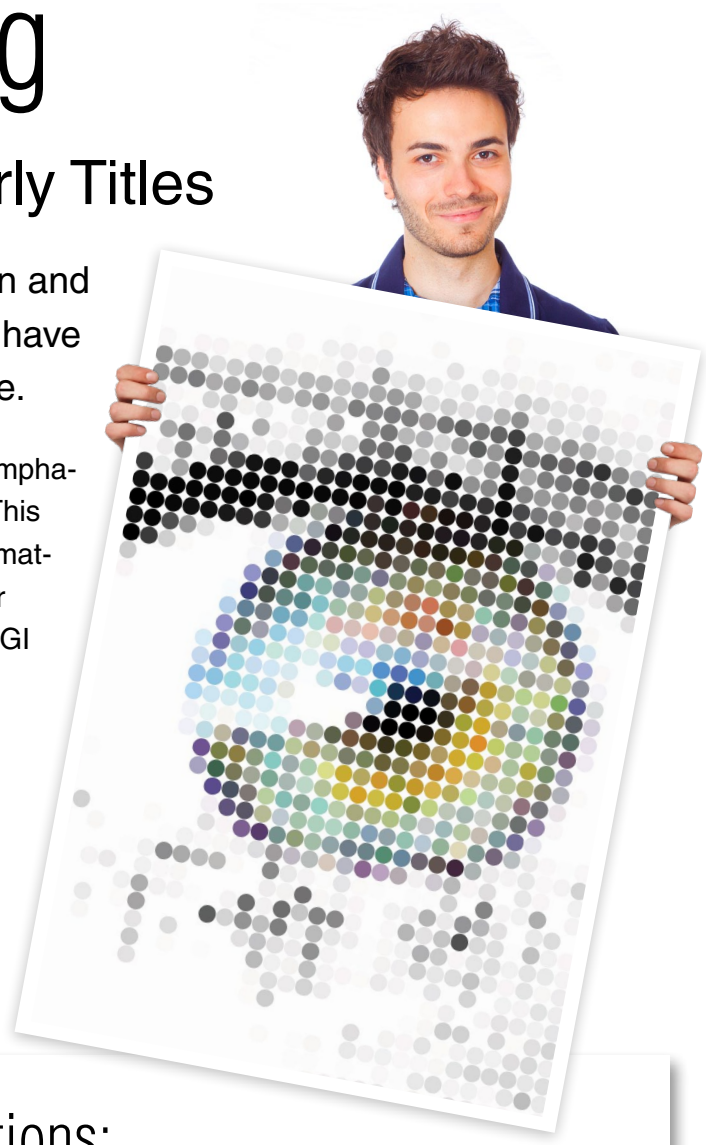

As technology continues to advance, the design and application of multimedia tools and techniques have drastically improved the field of imaging science.

The **Computer Vision and Image Processing** collection emphasizes the importance of technology in the multimedia field. This valuable compilation includes 19 reference titles on bioinformatics, multimedia technology, digital communication, computer vision, image processing, and more. These titles represent IGI Global's significant coverage of this ever-evolving field.

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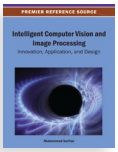
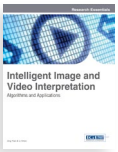



## Intelligent Computer Vision and Image Processing: Innovation, Application, and Design

Muhammad Sarfraz (Kuwait University, Kuwait)
ISBN: 9781466639065; © 2013; 354 pp.

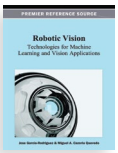
Provides methods and research on various disciplines related to the science and technology of machines.




## Intelligent Image and Video Interpretation: Algorithms and Applications

Jing Tian (Wuhan University of Science and Technology, China), et al.
ISBN: 9781466639584; © 2013; 288 pp.

Covers all aspects of image and video analysis from low-level early visions to high-level recognition.




## Robotic Vision: Technologies for Machine Learning and Vision Applications

Jose Garcia-Rodriguez (University of Alicante), et al.
ISBN: 9781466626720; © 2013; 535 pp.

Includes current research on the fields of robotics, machine vision, image processing, and pattern recognition that is important to applying machine vision methods in the real world.


## Developing and Applying Biologically-Inspired Vision Systems: Interdisciplinary Concepts

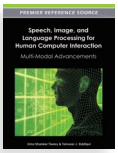
Marc Pomplun (University of Massachusetts Boston, USA), et al.
ISBN: 9781466625396; © 2013; 446 pp.

Provides interdisciplinary research which evaluates the performance of machine visual models and systems in comparison to biological systems.


## Graph-Based Methods in Computer Vision: Developments and Applications

Xiao Bai (Beihang University, China), et al.
ISBN: 9781466618916; © 2013; 395 pp.

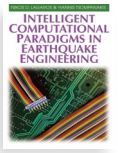
Presents a sampling of the research issues related to applying graph-based methods in computer vision.




## Speech, Image, and Language Processing for Human Computer Interaction: Multi-Modal Advancements

Uma Shanker Tiwary (Indian Institute of Information Technology Allahabad, India), et al.
ISBN: 9781466609549; © 2012; 386 pp.

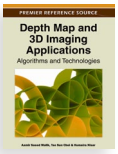
Aims to indentify the emerging research areas in Human Computer Interaction and discusses the current state of the arts in these areas.




## Intelligent Computational Paradigms in Earthquake Engineering

Nikos Lagaros (University of Crete, Greece), et al.
ISBN: 978-1-59904-099-8; © 2007; pp. 444

Presents the application of learning machines, artificial neural networks, and support vector machines as highly-efficient pattern recognition tools for structural damage detection.




## Depth Map and 3D Imaging Applications: Algorithms and Technologies

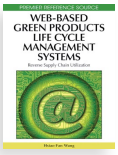
Aamir Saeed Malik (Universiti Teknologi Petronas, Malaysia), et al.
ISBN: 9781613503263; © 2012; 648 pp.

Presents various 3D algorithms developed in the recent years to investigate the application of 3D methods in various domains.


## Intravascular Imaging: Current Applications and Research Developments

Vasilios D. Tsakanikas (University of Ioannina, Greece), et al.
ISBN: 9781613500958; © 2012; 478 pp.

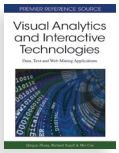
Presents all available intravascular imaging techniques and analyzes their impact in clinical practice and research.




## Applied Signal and Image Processing: Multidisciplinary Advancements

Rami Qahwaji (University of Bradford, UK), et al.
ISBN: 9781609604776; © 2011; 414 pp.

Covers state-of-the-art applications in both signal and image processing, which include optical communication and sensing, wireless communication management, face recognition and many others.




## Visual Analytics and Interactive Technologies: Data, Text and Web Mining Applications

Qingyu Zhang (Arkansas State University, USA), et al.
ISBN: 9781609601027; © 2011; 362 pp.

Comprehensive reference on concepts, algorithms, theories, applications, software, and visualization of data mining, text mining, Web mining and computing/supercomputing.


## Computer Vision for Multimedia Applications: Methods and Solutions

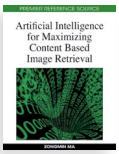
Jinjun Wang (NEC Laboratories America, Inc., USA), et al.
ISBN: 9781609600242; © 2011; 354 pp.

Includes the latest developments in computer vision methods applicable to various problems in multimedia computing.


## Biomedical Image Analysis and Machine Learning Technologies: Applications and Techniques

Fabio A. Gonzalez (National University of Colombia, Colombia), et al.
ISBN: 9781605669564; © 2010; 390 pp.

Provides a panorama of the current boundary between biomedical complexity coming from the medical image context and the multiple techniques which have been used for solving many of these problems.




## Artificial Intelligence for Maximizing Content Based Image Retrieval

Zongmin Ma (Northeastern University, China)
ISBN: 9781605661742; © 2009; 450 pp.

Discusses major aspects of content-based image retrieval (CBIR) using current technologies and applications within the artificial intelligence (AI) field.


## Pattern Recognition Technologies and Applications: Recent Advances

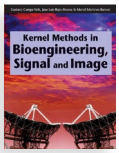
Brijesh Verma (Central Queensland University, Australia), et al.
ISBN: 9781599048079; © 2008; 454 pp.

Provides cutting-edge pattern recognition techniques and applications.


## Design Pattern Formalization Techniques

Toufik Taibi
ISBN: 9781599042190; © 2007; 400 pp.

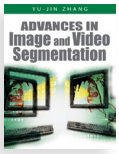
Explains details on several specification languages, allowing readers to choose the most suitable formal technique to solve their specific inquiries.




## Kernel Methods in Bioengineering, Signal and Image Processing

Gustavo Camps-Valls, et al.
ISBN: 9781599040424; © 2007; 430 pp.

Covers real-world applications, such as computational biology, text categorization, time series prediction, interpolation, system identification, speech recognition, image de-noising, and many other topics.




## Advances in Image and Video Segmentation

Yu-Jin Zhang (Tsinghua University, China)
ISBN: 9781591407539; © 2006; 472 pp.

Brings together the latest results from researchers involved in state-of-the-art work in image and video segmentation, providing a collection of modern works made by more than 50 experts around the world.


## Multimedia Systems and Content-Based Image Retrieval

Sagarmay Deb
ISBN: 9781591401568; © 2004; 406 pp.

Addresses multimedia systems and content-based image retrieval which are two areas that are changing our life-styles because they together cover creation, maintenance, accessing and retrieval of video, audio, image, textual and graphic data.