Audio And Video Based Biometric Person Authentication 4th International Conference Avbpa 2003 Guildford Uk June 9 11 2003 Proceedings Lecture Notes In Computer Science

A major new professional reference work on fingerprint security systems and technology from leading international researchers in the field. Handbook provides authoritative and comprehensive coverage of all major topics, concepts, and methods for fingerprint security systems. This unique reference work is an absolutely essential resource for all biometric security professionals, researchers, and systems administrators.

This book constitutes the refereed proceedings of the Third International Conference on Audio- and Video-Based Biometric Person Authentication, AVBPA 2001, held in Halmstad, Sweden in June 2001. The 51 revised papers presented together with three invited papers were carefully reviewed and selected for inclusion in the book. The papers are organized in topical sections on face as biometrics; face image processing; speech as biometrics and speech processing; fingerprints as biometrics; gait as biometrics; and hand, signature, and iris as biometrics.

This book constitutes the refereed proceedings of the International Workshop on Biometric Recognition Systems, IWBRS 2005, held in Beijing, China in October 2005 within the scope of ICCV 2005, the International Conference on Computer Vision. This workshop combines the annual Chinese Conference on Biometric Recognition (Sinobiometrics 2005). The 32 revised full papers were carefully reviewed and selected from 130 submissions. The papers address the problems of automatic and reliable authentication of individuals in face, iris, fingerprint, palmprint, speaker, writing and other biometrics, and contribute new ideas to research and development of reliable and practical solutions for biometric authentication.

Handbook of Fingerprint Recognition

Face Biometrics for Personal Identification

Handbook of Multibiometrics

Second International Conference, AVBPA '99, March 22-23, 1999, Washington, D.C. : Proceedings

Second International Workshop, AMFG 2005, Beijing, China, October 16, 2005, Proceedings

Guide to Biometric Reference Systems and Performance Evaluation

"Data Fusion is a very broad interdisciplinary technology domain. It provides techniques and methods for; integrating information from multiple sources and using the complementarities of these detections to derive maximum information about the phenomenon being observed; analyzing and deriving the meaning of these observations and predicting possible consequences of the observed state of the environment; selecting the best course of action; and controlling the actions. Here, the focus is on the more mature phase of data fusion, namely the detection and identification / classification of phenomena being observed and exploitation of the related methods for Security-Related Civil Science and Technology (SST) applications. It is necessary to; expand on the data fusion methodology pertinent to Situation Monitoring, Incident Detection, Alert and Response Management; discuss some related Cognitive Engineering and visualization issues; provide an insight into the architectures and methodologies for building a data fusion system; discuss fusion approaches to image exploitation with emphasis on security applications; discuss novel distributed tracking approaches as a necessary step of situation monitoring and incident detection; and provide examples of real situations, in which data fusion can enhance incident detection, prevention and response capability. In order to give a logical presentation of the data fusion material, first the general concepts are highlighted (Fusion Methodology, Human Computer Interactions and Systems and Architectures), closing with several applications (Data Fusion for Imagery, Tracking and Sensor Fusion and Applications and Opportunities for Fusion)."

"This book introduces the readers to the various aspects of visual speech recognitions, including lip segmentation from video sequence, lip feature extraction and modeling, feature fusion and classifier design for visual speech recognition and speaker verification" résumé de l'éditeur.

This book aims to bring together selected recent advances, applications and original results in the area of biometric face recognition. They can be useful for researchers, engineers, graduate and postgraduate students, experts in this area and hopefully also for people interested generally in computer science, security, machine learning and artificial intelligence. Various methods, approaches and algorithms for recognition of human faces are used by authors of the chapters of this book, e.g. PCA, LDA, artificial neural networks, wavelets, curvelets, kernel methods, Gabor filters, active appearance models, 2D and 3D representations, optical correlation, hidden Markov models and others. Also a broad range of problems is covered: feature extraction and dimensionality reduction (chapters 1-4), 2D face recognition from the point of view of full system proposal (chapters 5-10), illumination and pose problems (chapters 11-13), eye movement (chapter 14), 3D face recognition (chapters 15-19) and hardware issues (chapters 19-20).

Data Fusion for Situation Monitoring, Incident Detection, Alert and Response Management

Third International Conference, AVBPA 2001 Halmstad, Sweden, June 6-8, 2001. Proceedings

Second International Conference, AVBPA '99, Washington, D.C., March 22-23, 1999 : Proceedings

International Workshop on Biometric Recognition Systems, IWBRS 2005, Beijing, China, October 22 – 23, 2005, Proceedings

Advanced Pattern Recognition Technologies with Applications to Biometrics

Multimedia Image and Video Processing

Palmprint Authentication is the first book to provide a comprehensive introduction to palmprint technologies. It reveals automatic biometric techniques for personal identification using palmprint, from the approach based on offline palmprint images, to the current state-of-the-art algorithm using online palmprint images. Palmprint Authentication provides the reader with a basic concept of Palmprint Authentication. It also includes an in-depth discussion of Palmprint Authentication technologies, a detailed description of Palmprint Authentication systems, and an up-to-date coverage of how these issues are developed. This book is suitable for different levels of readers: those who want to learn more about palmprint technology, and those who wish to understand, participate, and/or develop a palmprint authentication system. Palmprint Authentication is effectively a handbook for biometric research and development. Graduate students and researchers in computer science, electrical engineering, systems science, and information technology will all find it uniquely useful, not only as a reference book, but also as a text book. Researchers and practitioners in industry, and R&D laboratories working in the fields of security system design, biometrics, immigration, law enforcement, control, and pattern recognition will also benefit from this volume.

This book constitutes the refereed proceedings of the 5th International Conference on Audio- and Video-Based Biometric Person Authentication, AVBPA 2005, held in Hilton Rye Town, NY, USA, in July 2005. The 66 revised oral papers and 50 revised poster papers presented were carefully reviewed and selected from numerous submissions. The papers discuss all aspects of biometrics including iris, fingerprint, face, palm print, gait, gesture, speaker, and signature; theoretical and algorithmic issues are dealt with as well as systems issues. The industrial side of biometrics is evident from presentations on smart cards, wireless devices, and architectural and implementation aspects.

This book constitutes the refereed proceedings of the First International Conference on Audio- and Video-based Biometric Person Authentication, AVBPA'97, held in Crans-Montana, Switzerland, in March 1997. The 49 revised papers presented were carefully reviewed and selected by the program committee for inclusion in the book; also included are four invited contributions. The papers are organized in sections on facial features localisation, lip and facial motion, visual non-face biometrics, face-based authentication, text-dependent speaker authentication, text-independent authentication, audio-video features and fusion, and systems and applications.

March 22-23, 1999 ; Washington

Speech, Audio, Image and Biomedical Signal Processing using Neural Networks

Unimodal and Multimodal Biometric Data Indexing

Progress in Nonlinear Speech Processing

Face Recognition

Multisensor Surveillance Systems

Audio- and Video-based Biometric Person AuthenticationFirst International Conference, AVBPA '97, Crans-Montana, Switzerland, March 12 - 14, 1997, ProceedingsSpringer Science & Business Media

With an A–Z format, this encyclopedia provides easy access to relevant information on all aspects of biometrics. It features approximately 250 overview entries and 800 definitional entries. Each entry includes a definition, key words, list of synonyms, list of related entries, illustration(s), applications, and a bibliography. Most entries include useful literature references providing the reader with a portal to more detailed information.

The development of technologies for the identi?cation of individuals has driven the interest and curiosity of many people. Spearheaded and inspired by the Bertillon coding system for the classi?cation of humans based on physical measurements, scientists and engineers have been trying to invent new devices and classi?cation systems to capture the human identity from its body measurements. One of the main limitations of the precursors of today's biometrics, which is still present in the vast majority of the existing biometric systems, has been the need to keep the device in close contact with the subject to capture the biometric measurements. This clearly limits the applicability and convenience of biometric systems. This book presents an important step in addressing this limitation by describing a number of methodologies to capture meaningful biometric information from a distance. Most materials covered in this book have been presented at the International Summer School on Biometrics which is held every year in Alghero, Italy and which has become a ?agship activity of the IAPR Technical Committee on Biometrics (IAPR TC4). The last four chapters of the book are derived from some of the best p- sentations by the participating students of the school. The educational value of this book is also highlighted by the number of proposed exercises and questions which will help the reader to better understand the proposed topics.

Handbook of Remote Biometrics

First International Conference, Avbpa'97, Crans-Montana, Switzerland, March 12-14, 1997 : Proceedings

(AVBPA 2001)

I - Z.

Advances in Biometrics

... International Conference, AVBPA ... Proceedings

This book constitutes the refereed proceedings of the Second International Workshop on Analysis and Modelling of Faces and Gestures, AMFG 2005, held in Beijing, China in October 2005 within the scope of ICCV 2005, the International Conference on Computer Vision. The 30 revised full papers presented together with 2 invited papers were carefully reviewed and selected from 90 submissions. The papers give a survey of the status of recognition, analysis and modeling of face and gesture. The topics of these papers range from feature representation, robust recognition, learning, 3D modeling, to psychology.

As multimedia applications have become part of contemporary daily life, numerous paradigm-shifting technologies in multimedia processing have emerged over the last decade. Substantially updated with 21 new chapters, Multimedia Image and Video Processing, Second Edition explores the most recent advances in multimedia research and applications. This edition presents a comprehensive treatment of multimedia information mining, security, systems, coding, search, hardware, and communications as well as multimodal information fusion and interaction. Clearly divided into seven parts, the book begins with a section on standards, fundamental methods, design issues, and typical architectures. It then focuses on the coding of video and multimedia content before covering multimedia search, retrieval, and management. After examining multimedia security, the book describes multimedia communications and networking and explains the architecture design and implementation for multimedia image and video processing. It concludes with a section on multimedia systems and applications. Written by some of the most prominent experts in the field, this updated edition provides readers with the latest research in multimedia processing and equips them with advanced techniques for the design of multimedia systems.

Biometric authentication has been widely used for access control and security systems over the past few years. The purpose of this book is to provide the readers with life cycle of different biometric authentication systems from their design and development to qualification and final application. The major systems discussed in this book include fingerprint identification, face recognition, iris segmentation and classification, signature verification and other miscellaneous systems which describe management policies of biometrics, reliability measures, pressure based typing and signature verification, bio-chemical systems and behavioral characteristics. In summary, this book provides the students and the researchers with different approaches to develop biometric authentication systems and at the same time includes state-of-the-art approaches in their design and development. The approaches have been thoroughly tested on standard databases and in real world applications.

Information Systems, Technology and Management

Analysis and Modelling of Faces and Gestures

Advances in Biometric Person Authentication

Audio- and Video-based Biometric Person Authentication (AVBPA 2001)

Proceedings, Second International Conference on Audio- and Video-Based Biometric Person Authentication

Audio- and Video-based Biometric Person Authentication

This work is on biometric data indexing for large-scale identification systems with a focus on different biometrics data indexing methods. It provides state-of-the-art coverage including different biometric traits, together with the pros and cons for each. Discussion of different multimodal fusion strategies are also included.

This book constitutes the refereed proceedings of the Third International Conference on Audio- and Video-Based Biometric Person Authentication, AVBPA 2001, held in Halmstad, Sweden in June 2001.The 51 revised papers presented together with three invited papers were carefully reviewed and selected for inclusion in the book. The papers are organized in topical sections on face as biometrics; face image processing; speech as biometrics and speech processing; fingerprints as biometrics; gait as biometrics; and hand, signature, and iris as biometrics.

DSP for In-Vehicle and Mobile Systems is focused on digital signal processing strategies for improving information access, command and control, and communications for in-vehicle environments. It is expected that the next generation of human-to-vehicle interfaces will incorporate speech, video/image, and wireless communication modalities to provide more comfortable and safer driving ambiance. It is also expected that vehicles will become "smarter" and provide a level of wireless information sharing of resources regarding road, weather, traffic, and other information that drivers may need immediately or request at a later time while driving on the road. The format of this work centers on three themes: in-vehicle corpora, speech recognition/dialog systems with emphasis on car environments, and digital signal processing for mobile platforms involving noise suppression, image/video processing, and alternative communication scenarios that can be employed for in-vehicle applications. DSP for In-Vehicle and Mobile Systems is appropriate for researchers and professionals working in signal processing technologies, next generation vehicle design and networked-communications.

Lip Segmentation and Mapping

Visual Speech Recognition: Lip Segmentation and Mapping

Biometric Systems

DSP for In-Vehicle and Mobile Systems

Special Issue

Advanced Topics in Biometrics

This book constitutes of the major results of the EU COST (European Cooperation in the field of Scientific and Technical Research) Action 277: NSP, Nonlinear Speech Processing, running from April 2001 to June 2005. Coverage includes such areas as speech analysis for speech synthesis, speech recognition, speech-non speech discrimination and voice quality assessment, speech enhancement, and emotional state detection.

Humans are remarkable in processing speech, audio, image and some biomedical signals. Artificial neural networks are proved to be successful in performing several cognitive, industrial and scientific tasks. This peer reviewed book presents some recent advances and surveys on the applications of artificial neural networks in the areas of speech, audio, image and biomedical signal processing. It chapters are prepared by some reputed researchers and practitioners around the globe.

This volume constitutes the refereed proceedings of the 4th International Conference on Information Systems, Technology and Management, ICISTM 2010, held in Bangkok, Thailand, in March 2010. The 28 revised full papers presented together with 3 keynote lectures, 9 short papers, and 2 tutorial papers were carefully reviewed and selected from 86 submissions. The papers are organized in topical sections on information systems, information technology, information management, and applications.

Encyclopedia of Biometrics

International Conference, ICB 2006, Hong Kong, China, January 5-7, 2006, Proceedings

5th International Conference, AVBPA 2005, Hilton Rye Town, NY, USA, July 20-22, 2005, Proceedings

Palmprint Authentication

Design and Applications

Multi-Sensory Multi-Modal Systems

"This book focuses on two kinds of advanced biometric recognition technologies, biometric data discrimination and multi-biometrics"--Provided by publisher.

Biometrics is the study of methods for uniquely recognizing humans based on one or more intrinsic physical or behavioral traits. After decades of research activities, biometrics, as a recognized scientific discipline, has advanced considerably both in practical technology and theoretical discovery to meet the increasing need of biometric deployments. In this book, the editors provide both a concise and accessible introduction to the field as well as a detailed coverage on the unique research problems with their solutions in a wide spectrum of biometrics research ranging from voice, face, fingerprint, iris, handwriting, human behavior to multimodal biometrics. The contributions also present the pioneering efforts and state-of-the-art results, with special focus on practical issues concerning system development. This book is a valuable reference for established researchers and it also gives an excellent introduction for beginners to understand the challenges.

Biometrics has moved from using fingerprints to using many methods of assessing human physical and behavioral traits. This guide introduces a new performance evaluation framework designed to offer full coverage of performance evaluation of biometric systems.

Audio- and Video-based Biometric Person Authentification

4th International Conference, ICISTM 2010, Bangkok, Thailand, March 11-13, 2010. Proceedings

Audio-and Video-Based Biometric Person Authentication

for Surveillance and Security

4th International Conference, AVBPA 2003, Guildford, UK, June 9-11, 2003, Proceedings

Monitoring of public and private sites is increasingly becoming a very important and critical issue, especially after the recent flurry of terrorist attacks including the one on the Word Trade Center in September 2001. It is, therefore, imperative that effective multisensor surveillance systems be developed to protect the society from similar attacks in the future. The new generation of surveillance systems to be developed have a specific requirement: they must be able to automatically identify criminal and terrorist activity without sacrificing individual privacy to the extent possible. Privacy laws concerning monitoring and surveillance systems vary from country to country but, in general, they try to protect the privacy of their citizens. Monitoring and visual surveillance has numerous other applications. It can be employed to help invalids or handicapped and to monitor the activities of elderly people. It can be used to monitor large events such as sporting events, as well. Nowadays, monitoring is employ~d in several different contexts including transport applications, such as monitoring of railway stations and airports, dangerous environments like nuclear facilities or traffic flows on roads and bridges. The latest generation of surveillance systems mainly rely on hybrid analog-digital, or completely digital video communications and processing methods and take advantage of the greater of flexibility offered by video processing algorithms that are capable focusing a human operator's attention on a set of interesting situations.

The refereed proceedings of the 4th International Conference on Audio-and Video-Based Biometric Person Authentication, AVBPA 2003, held in Guildford, UK, in June 2003. The 39 revised full plenary papers and 72 revised full poster papers were carefully reviewed and selected for presentation. There are topical sections on face; speech; fingerprint; image, video processing, and tracking; general issues; handwriting, signature, and palm; gait; and fusion.

Details multimodal biometrics and its exceptional utility for increasingly reliable human recognition systems. Reveals the substantial advantages of multimodal systems over conventional identification methods.

The Fusion Perspective

Audio- and Video-Based Biometric Person Authentication

First International Conference, AVBPA '97, Crans-Montana, Switzerland, March 12 - 14, 1997, Proceedings

This book constitutes the refereed proceedings of the International Conference on Biometrics, ICB 2006, held in Hong Kong, China in January 2006. The book includes 104 revised full papers covering such areas of biometrics as the face, fingerprint, iris, speech and signature, biometric fusion and performance evaluation, gait, keystrokes, and more. In addition the results of the Authentication Competition (FAC 2006) are also announced in this volume.

This book provides ample coverage of theoretical and experimental state-of-the-art work as well as new trends and directions in the biometrics field. It offers students and software engineers a thorough understanding of how some core low-level building blocks of a multi-biometric system are implemented. While this book covers a range of biometric traits, its main emphasis is pl on multi-sensory and multi-modal face biometrics algorithms and systems.