

Pattern Classification A Unified View Of Statistic

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Morphological Image Analysis - Pierre Soille 2013-03-14

From reviews of the first edition: "This is a scholarly tour de force through the world of morphological image analysis [...]. I recommend this book unreservedly as the best one I have encountered on this particular topic [...]" BMVA News

Structural, Syntactic, and Statistical Pattern Recognition - Niels da Vitoria Lobo 2008-11-24

This book constitutes the refereed proceedings of the 12th International Workshop on Structural and Syntactic Pattern Recognition, SSPR 2008 and the 7th International Workshop on Statistical Techniques in Pattern Recognition, SPR 2008, held jointly in Orlando, FL, USA, in December 2008 as a satellite event of the 19th International Conference of Pattern Recognition, ICPR 2008. The 56 revised full papers and 42 revised poster papers presented together with the abstracts of 4 invited papers were carefully reviewed and selected from 175 submissions. The papers are organized in topical sections on graph-based methods, probabilistic and stochastic structural models for PR, image and video analysis, shape analysis, kernel methods, recognition and classification, applications, ensemble methods, feature selection, density estimation and clustering, computer vision and biometrics, pattern recognition and applications, pattern recognition, as well as feature selection and clustering.

Shape Classification and Analysis - Luciano da Fona Costa 2018-10-03

Because the properties of objects are largely determined by their geometric features, shape analysis and classification are essential to almost every applied scientific and technological area. A detailed understanding of the geometrical features of real-world entities (e.g., molecules, organs, materials and components) can provide important clues about their origin and function. When properly and carefully applied, shape analysis offers an exceedingly rich potential to yield useful applications in diverse areas ranging from material sciences to biology and neuroscience. Get Access to the Authors' Own Cutting-Edge Open-Source Software Projects—and Then Actually Contribute to Them Yourself! The authors of Shape Analysis and Classification: Theory and Practice, Second Edition have improved the bestselling first edition by updating the tremendous progress in the field. This exceptionally accessible book presents the most advanced imaging techniques used for analyzing general biological shapes, such as those of cells, tissues, organs, and organisms. It implements numerous corrections and improvements—many of which were suggested by readers of the first edition—to optimize understanding and create what can truly be called an interactive learning experience. New Material in This Second Edition Addresses Graph and complex networks Dimensionality reduction Structural pattern recognition Shape representation using graphs Graphically reformulated, this edition updates equations, figures, and references, as well as slides that will be useful in related courses and general discussion. Like the popular first edition, this text is applicable to many fields and certain to become a favored addition to any library. Visit <http://www.vision.ime.usp.br/~cesar/shape/> for Useful Software, Databases, and Videos

Multiple Classifier Systems - Nikunj C. Oza 2005-06-02

Following its five predecessors published by Springer, this volume contains the proceedings of the 6th International Workshop on Multiple Classifier Systems (MCS 2005) held at the Embassy Suites in Seaside, California, USA, June 13 -15, 2005.

Image Analysis - Heikki Kalviainen 2005-06-16

This book constitutes the refereed proceedings of the 14th Scandinavian Conference on Image Analysis, SCIA 2005, held in Joensuu, Finland in June 2005. The 124 papers presented together with 6 invited papers were carefully reviewed and selected from 236 submissions. The papers are organized in topical sections on image segmentation and understanding, color image processing, applications, theory, medical image processing, image compression, digitalization of cultural heritage, computer vision, machine vision, and pattern recognition.

Artificial Neural Networks in Pattern Recognition - Lionel Prevost 2008-06-30

Annotation This book constitutes the refereed proceedings of the Third TC3 IAPR Workshop on Artificial Neural Networks in Pattern Recognition, ANNPR 2008, held in Paris, France, in July 2008. The 18 revised full papers and 11 revised poster papers presented were carefully reviewed and selected from 57 submissions. The papers combine many ideas from machine learning, advanced statistics, signal and image processing for solving complex real-world pattern recognition problems. The papers are organized in topical sections on unsupervised learning, supervised learning, multiple classifiers, applications, and feature selection.

Credit Risk Modeling - Elizabeth Mays 1998-12-10

Covers: ♦ Implementing an application scoring system ♦ Behavior modeling to manage your portfolio ♦ Incorporating economic factors ♦ Statistical techniques for choosing the optimal credit risk model ♦ How to set cutoffs and override rules ♦ Modeling for the sub-prime market ♦ How to evaluate and monitor credit risk models This is an indispensable guide for credit professionals and risk managers who want to understand and implement modeling techniques for increased profitability. In this one-of-a-kind text, experts in credit risk provide a step-by-step guide to building and implementing models both for evaluating applications and managing existing portfolios.

Computational Intelligence for Knowledge-Based System Design - Eyke Hüllermeier 2010-06-30

The book constitutes the refereed proceedings of the 13th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, IPMU 2010, held in Dortmund, Germany from June 28 - July 2, 2010. The 77 revised full papers were carefully reviewed and selected from 320 submissions and reflect the richness of research in the field of Computational Intelligence and represent developments on topics as: machine learning, data mining, pattern recognition, uncertainty handling, aggregation and fusion of information as well as logic and knowledge processing.

Statistical and Neural Classifiers - Sarunas Raudys 2012-12-06

The classification of patterns is an important area of research which is central to all pattern recognition fields, including speech, image, robotics, and data analysis. Neural networks have been used successfully in a number of these fields, but so far their application has been based on a 'black box approach' with no real understanding of how they work. In this book, Sarunas Raudys - an internationally respected researcher in the area - provides an excellent mathematical and applied introduction to how neural network classifiers work and how they should be used.. .

Machine Learning Techniques for Time Series Classification - Michael Botsch 2023-06-23

Classification of time series is an important task in various fields, e.g., medicine, finance, and industrial applications. This work discusses strong temporal classification using machine learning techniques. Here, two problems must be solved: the detection of those time instances when the class labels change and the correct

assignment of the labels. For this purpose the scenario-based random forest algorithm and a segment and label approach are introduced. The latter is realized with either the augmented dynamic time warping similarity measure or with interpretable generalized radial basis function classifiers. The main application presented in this work is the detection and categorization of car crashes using machine learning. Depending on the crash severity different safety systems, e.g., belt tensioners or airbags must be deployed at time instances when the best-possible protection of passengers is assured.

Neuro-fuzzy Pattern Recognition - Horst Bunke 2000

Neural networks and fuzzy techniques are among the most promising approaches to pattern recognition. Neuro-fuzzy systems aim at combining the advantages of the two paradigms. This book is a collection of papers describing state-of-the-art work in this emerging field. It covers topics such as feature selection, classification, classifier training, and clustering. Also included are applications of neuro-fuzzy systems in speech recognition, land mine detection, medical image analysis, and autonomous vehicle control. The intended audience includes graduate students in computer science and related fields, as well as researchers at academic institutions and in industry.

Pattern Recognition and Data Mining - Sameer Singh 2005-09-16

This LNCS volume contains the papers presented at the 3rd International Conference on Advances in Pattern Recognition (ICAPR 2005) organized in August, 2005 in the beautiful city of Bath, UK.

Pattern Classification - Jürgen Schürmann 1996-03-15

PATTERN CLASSIFICATION a unified view of statistical and neural approaches The product of years of research and practical experience in pattern classification, this book offers a theory-based engineering perspective on neural networks and statistical pattern classification. Pattern Classification sheds new light on the relationship between seemingly unrelated approaches to pattern recognition, including statistical methods, polynomial regression, multilayer perceptron, and radial basis functions. Important topics such as feature selection, reject criteria, classifier performance measurement, and classifier combinations are fully covered, as well as material on techniques that, until now, would have required an extensive literature search to locate. A full program of illustrations, graphs, and examples helps make the operations and general properties of different classification approaches intuitively understandable. Offering a lucid presentation of complex applications and their algorithms, Pattern Classification is an invaluable resource for researchers, engineers, and graduate students in this rapidly developing field.

Neural Networks and Soft Computing - Leszek Rutkowski 2003-02-12

This volume presents new trends and developments in soft computing techniques. Topics include: neural networks, fuzzy systems, evolutionary computation, knowledge discovery, rough sets, and hybrid methods. It also covers various applications of soft computing techniques in economics, mechanics, medicine, automatics and image processing. The book contains contributions from internationally recognized scientists, such as Zadeh, Bubnicki, Pawlak, Amari, Batyrshin, Hirota, Koczy, Kosinski, Novák, S.-Y. Lee, Pedrycz, Raudys, Setiono, Sincak, Strumillo, Takagi, Usui, Wilamowski and Zurada. An excellent overview of soft computing methods and their applications.

Intelligent and Adaptive Systems in Medicine - Olivier C. L. Haas 2008-03-19

Intelligent and adaptive techniques are rapidly being used in all stages of medical treatment, from the initial diagnosis to planning delivery and follow-up therapy. To realize the full potential of these techniques, developers and end users must understand both the underlying technology and the specifics of the medical application considered. Focusing on this growing area of interest, Intelligent and Adaptive Systems in Medicine clearly and concisely explains a range of adaptive and intelligent systems, highlighting their benefits and limitations with realistic medical examples. Bringing together theory and practice, this volume describes the application of adaptive and intelligent control as well as intelligent systems in the diagnosis, planning, treatment, and follow up of diseases such as cancer. Each chapter presents a family of an intelligent and adaptive system, explains the techniques and algorithms behind these systems, and explores how to solve medical and biomedical problems using intelligent and adaptive systems. The book focuses on the methods of fuzzy logic, artificial neural networks, neuro-fuzzy modeling, adaptive and predictive control, systems and statistical modeling, and image processing. By assessing the use of intelligent and adaptive techniques for medical diagnosis and therapy, this guide promotes further research in this area of “techno-

medicine.” It provides researchers and clinicians with the tools and processes that are leading to the invaluable use of intelligent systems in early diagnoses and effective treatment.

Structural, Syntactic, and Statistical Pattern Recognition - Georgy Gimeľ'farb 2012-10-22

This volume constitutes the refereed proceedings of the Joint IAPR International Workshops on Structural and Syntactic Pattern Recognition (SSPR 2012) and Statistical Techniques in Pattern Recognition (SPR 2012), held in Hiroshima, Japan, in November 2012 as a satellite event of the 21st International Conference on Pattern Recognition, ICPR 2012. The 80 revised full papers presented together with 1 invited paper and the Pierre Devijver award lecture were carefully reviewed and selected from more than 120 initial submissions. The papers are organized in topical sections on structural, syntactical, and statistical pattern recognition, graph and tree methods, randomized methods and image analysis, kernel methods in structural and syntactical pattern recognition, applications of structural and syntactical pattern recognition, clustering, learning, kernel methods in statistical pattern recognition, kernel methods in statistical pattern recognition, as well as applications of structural, syntactical, and statistical methods.

Artificial Intelligence Methods and Tools for Systems Biology - W. Dubitzky 2007-09-29

This book provides simultaneously a design blueprint, user guide, research agenda, and communication platform for current and future developments in artificial intelligence (AI) approaches to systems biology. It places an emphasis on the molecular dimension of life phenomena and in one chapter on anatomical and functional modeling of the brain. As design blueprint, the book is intended for scientists and other professionals tasked with developing and using AI technologies in the context of life sciences research. As a user guide, this volume addresses the requirements of researchers to gain a basic understanding of key AI methodologies for life sciences research. Its emphasis is not on an intricate mathematical treatment of the presented AI methodologies. Instead, it aims at providing the users with a clear understanding and practical know-how of the methods. As a research agenda, the book is intended for computer and life science students, teachers, researchers, and managers who want to understand the state of the art of the presented methodologies and the areas in which gaps in our knowledge demand further research and development. Our aim was to maintain the readability and accessibility of a textbook throughout the chapters, rather than compiling a mere reference manual. The book is also intended as a communication platform seeking to bridge the cultural and technological gap among key systems biology disciplines. To support this function, contributors have adopted a terminology and approach that appeal to audiences from different backgrounds.

Biomedical Signal Analysis - Rangaraj M. Rangayyan 2015-04-24

The book will help assist a reader in the development of techniques for analysis of biomedical signals and computer aided diagnoses with a pedagogical examination of basic and advanced topics accompanied by over 350 figures and illustrations. Wide range of filtering techniques presented to address various applications 800 mathematical expressions and equations Practical questions, problems and laboratory exercises Includes fractals and chaos theory with biomedical applications

Digital Document Processing - Bidyut B. Chaudhuri 2007-03-13

This book brings all the major and frontier topics in the field of document analysis together into a single volume, creating a unique reference source that will be invaluable to a large audience of researchers, lecturers and students working in this field. With chapters written by some of the most distinguished researchers active in this field, this book addresses recent advances in digital document processing research and development.

Handbook of Neural Network Signal Processing - Yu Hen Hu 2018-10-03

The use of neural networks is permeating every area of signal processing. They can provide powerful means for solving many problems, especially in nonlinear, real-time, adaptive, and blind signal processing. The Handbook of Neural Network Signal Processing brings together applications that were previously scattered among various publications to provide an up-to-date, detailed treatment of the subject from an engineering point of view. The authors cover basic principles, modeling, algorithms, architectures, implementation procedures, and well-designed simulation examples of audio, video, speech, communication, geophysical, sonar, radar, medical, and many other signals. The subject of neural networks and their application to signal processing is constantly improving. You need a handy reference that will inform you of current applications in this new area. The Handbook of Neural Network Signal Processing provides this much needed service for all

engineers and scientists in the field.

Kernel Methods in Bioengineering, Signal and Image Processing - Gustavo Camps-Valls 2007-01-01

"This book presents an extensive introduction to the field of kernel methods and real world applications. The book is organized in four parts: the first is an introductory chapter providing a framework of kernel methods; the others address Bioengineering, Signal Processing and Communications and Image Processing"--Provided by publisher.

Artificial Neural Networks-Icann '97 - Wulfram Gerstner 1997-09-29

Content Description #Includes bibliographical references and index.

Computer Recognition Systems - Marek Kurzynski 2007-12-13

This book contains papers accepted for presentation at the 4 International Conference on Computer Recognition Systems CORES'05, May 22-25, 2005, Rydzyna Castle (Poland), This conference is a continuation of a series of conferences on similar topics (KOSYR) organized each second year, since 1999, by the Chair of Systems and Computer Networks, Wroclaw University of Technology. An increasing interest to those conferences paid not only by home but also by foreign participants inspired the organizers to transform them into conferences of international range. Our expectations that the community of specialists in computer recognizing systems will find CORES'05 a proper form of maintaining the tradition of the former conferences have been confirmed by a large number of submitted papers. Alas, organizational constraints caused a necessity to narrow the acceptance criteria so that only 100 papers have been finally included into the conference program. The area covered by accepted papers is still very large and it shows how vivacious is scientific activity in the domain of computer recognition methods and systems. It contains various theoretical approaches to the recognition problem based on mathematical statistics, fuzzy sets, morphological methods, wavelets, syntactic methods, genetic algorithms, artificial neural networks, ontological models, etc. Most attention is still paid to visual objects recognition; however, acoustic, textual and other objects are also considered. Among application areas medical problems are in majority; recognition of faces, speech signals and textual information processing methods being also investigated.

Advanced Topics in Biometrics - Haizhou Li 2012

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 --

Computer Science -

Machine Learning in Document Analysis and Recognition - Simone Marinai 2008-01-10

The objective of Document Analysis and Recognition (DAR) is to recognize the text and graphical components of a document and to extract information. This book is a collection of research papers and state-of-the-art reviews by leading researchers all over the world. It includes pointers to challenges and opportunities for future research directions. The main goal of the book is to identify good practices for the use of learning strategies in DAR.

Structural, Syntactic, and Statistical Pattern Recognition - Dit-Yan Yeung 2006-08-09

This is the proceedings of the 11th International Workshop on Structural and Syntactic Pattern Recognition, SSPR 2006 and the 6th International Workshop on Statistical Techniques in Pattern Recognition, SPR 2006, held in Hong Kong, August 2006 alongside the Conference on Pattern Recognition, ICPR 2006. 38 revised full papers and 61 revised poster papers are included, together with 4 invited papers covering image analysis, character recognition, bayesian networks, graph-based methods and more.

Industrial Image Processing - Christian Demant 2012-12-06

This practical introduction focuses on how to build integrated solutions to industrial vision problems from

individual algorithms. It gives a hands-on guide for setting up automated visual inspection systems using real-world examples and the NeuroCheck software package, included on CD-ROM.

Handbook of Character Recognition and Document Image Analysis - H Bunke 1997-05-02

Optical character recognition and document image analysis have become very important areas with a fast growing number of researchers in the field. This comprehensive handbook with contributions by eminent experts, presents both the theoretical and practical aspects at an introductory level wherever possible. Contents:Pattern Classification Techniques Based on Function Approximation (U Kressel & J Schürmann)Combination of Multiple Classifier Decisions for Optical Character Recognition (L Lam et al.)Segmentation-Based Cursive Handwriting Recognition (M Shridhar & F Kimura)Handwritten Word Recognition Using Hidden Markov Models (A Kundu)Techniques for Improving OCR Results (A Dengel et al.)Multilingual Document Recognition (A L Spitz)Arabic Character Recognition (A Amin)Interpretation of Engineering Drawings (K Tombre & D Dori)Automatic Reading of Music Notation (D Bainbridge & N Carter)Algorithms for Automatic Signature Verification (G Dimauro et al.)Automatic Reading of Braille Documents (A Antonacopoulos)Information Retrieval and OCR (K Taghva et al.)Benchmarking DIA Systems (T A Nartker et al.)and other papers Readership: Computer scientists and engineers. keywords:

Neural Information Processing - Irwin King 2006-09-26

The three volume set LNCS 4232, LNCS 4233, and LNCS 4234 constitutes the refereed proceedings of the 13th International Conference on Neural Information Processing, ICONIP 2006, held in Hong Kong, China in October 2006. The 386 revised full papers presented were carefully reviewed and selected from 1175 submissions.

Remote Sensing - Robert A. Schowengerdt 2012-12-02

This book is a completely updated, greatly expanded version of the previously successful volume by the author. The Second Edition includes new results and data, and discusses a unified framework and rationale for designing and evaluating image processing algorithms. Written from the viewpoint that image processing supports remote sensing science, this book describes physical models for remote sensing phenomenology and sensors and how they contribute to models for remote-sensing data. The text then presents image processing techniques and interprets them in terms of these models. Spectral, spatial, and geometric models are used to introduce advanced image processing techniques such as hyperspectral image analysis, fusion of multisensor images, and digital elevation model extraction from stereo imagery. The material is suited for graduate level engineering, physical and natural science courses, or practicing remote sensing scientists. Each chapter is enhanced by student exercises designed to stimulate an understanding of the material. Over 300 figures are produced specifically for this book, and numerous tables provide a rich bibliography of the research literature.

Advances in Neural Networks - ISSN 2006 - Jun Wang 2006-05-10

This is Volume II of a three volume set constituting the refereed proceedings of the Third International Symposium on Neural Networks, ISSN 2006. 616 revised papers are organized in topical sections on neurobiological analysis, theoretical analysis, neurodynamic optimization, learning algorithms, model design, kernel methods, data preprocessing, pattern classification, computer vision, image and signal processing, system modeling, robotic systems, transportation systems, communication networks, information security, fault detection, financial analysis, bioinformatics, biomedical and industrial applications, and more.

Historical Land Use/Land Cover Classification Using Remote Sensing - Wafi Al-Fares 2013-06-25

Although the development of remote sensing techniques focuses greatly on construction of new sensors with higher spatial and spectral resolution, it is advisable to also use data of older sensors (especially, the LANDSAT-mission) when the historical mapping of land use/land cover and monitoring of their dynamics are needed. Using data from LANDSAT missions as well as from Terra (ASTER) Sensors, the authors shows in his book maps of historical land cover changes with a focus on agricultural irrigation projects. The kernel of this study was whether, how and to what extent applying the various remotely sensed data that were used here, would be an effective approach to classify the historical and current land use/land cover, to monitor the dynamics of land use/land cover during the last four decades, to map the development of the irrigation areas, and to classify the major strategic winter- and summer-irrigated agricultural crops in the study area of the Euphrates River Basin.

Handbook of Ultra-Wideband Short-Range Sensing - Jürgen Sachs 2013-01-15

Ranging from the theoretical basis of UWB sensors via implementation issues to applications, this much-needed book bridges the gap between designers and appliers working in civil engineering, biotechnology, medical engineering, robotic, mechanical engineering, safety and homeland security. From the contents: * History * Signal and systems in time and frequency domain * Propagation of electromagnetic waves (in frequency and time domain) * UWB-Principles * UWB-antennas and applicators * Data processing * Applications

Pattern Classification of Medical Images: Computer Aided Diagnosis - Xiao-Xia Yin 2017-06-27

This book presents advances in biomedical imaging analysis and processing techniques using time dependent medical image datasets for computer aided diagnosis. The analysis of time-series images is one of the most widely appearing problems in science, engineering, and business. In recent years this problem has gained importance due to the increasing availability of more sensitive sensors in science and engineering and due to the wide-spread use of computers in corporations which have increased the amount of time-series data collected by many magnitudes. An important feature of this book is the exploration of different approaches to handle and identify time dependent biomedical images. Biomedical imaging analysis and processing techniques deal with the interaction between all forms of radiation and biological molecules, cells or tissues, to visualize small particles and opaque objects, and to achieve the recognition of biomedical patterns. These are topics of great importance to biomedical science, biology, and medicine. Biomedical imaging analysis techniques can be applied in many different areas to solve existing problems. The various requirements arising from the process of resolving practical problems motivate and expedite the development of biomedical imaging analysis. This is a major reason for the fast growth of the discipline.

Pattern Recognition - Jürgen Beyerer 2017-12-04

The book offers a thorough introduction to Pattern Recognition aimed at master and advanced bachelor students of engineering and the natural sciences. Besides classification - the heart of Pattern Recognition - special emphasis is put on features, their typology, their properties and their systematic construction. Additionally, general principles that govern Pattern Recognition are illustrated and explained in a comprehensible way. Rather than presenting a complete overview over the rapidly evolving field, the book is to clarify the concepts so that the reader can easily understand the underlying ideas and the rationale behind the methods. For this purpose, the mathematical treatment of Pattern Recognition is pushed so far that the mechanisms of action become clear and visible, but not farther. Therefore, not all derivations are driven into the last mathematical detail, as a mathematician would expect it. Ideas of proofs are presented instead of complete proofs. From the authors' point of view, this concept allows to teach the essential ideas of Pattern Recognition with sufficient depth within a relatively lean book. Mathematical methods explained

thoroughly Extremely practical approach with many examples Based on over ten years lecture at Karlsruhe Institute of Technology For students but also for practitioners

Pattern Recognition - J.P. Marques de Sá 2012-12-06

The book provides a comprehensive view of pattern recognition concepts and methods, illustrated with real-life applications in several areas. A CD-ROM offered with the book includes datasets and software tools, making it easier to follow in a hands-on fashion, right from the start.

Trends in Neural Computation - Ke Chen 2006-11-15

Trends in Neural Computation includes twenty chapters contributed by leading experts or formed by extending well-selected papers presented in the 2005 International Conference on Natural Computation. The book reviews the latest progress in a range of different areas of neural computation, including theoretical neural computation, biologically plausible neural modeling, computational cognitive science, artificial neural networks - architectures and learning algorithms and their applications in real-world problems.

Image Processing - Tinku Acharya 2005-10-03

Image processing-from basics to advanced applications Learn how to master image processing and compression with this outstanding state-of-the-art reference. From fundamentals to sophisticated applications, Image Processing: Principles and Applications covers multiple topics and provides a fresh perspective on future directions and innovations in the field, including: * Image transformation techniques, including wavelet transformation and developments * Image enhancement and restoration, including noise modeling and filtering * Segmentation schemes, and classification and recognition of objects * Texture and shape analysis techniques * Fuzzy set theoretical approaches in image processing, neural networks, etc. * Content-based image retrieval and image mining * Biomedical image analysis and interpretation, including biometrical algorithms such as face recognition and signature verification * Remotely sensed images and their applications * Principles and applications of dynamic scene analysis and moving object detection and tracking * Fundamentals of image compression, including the JPEG standard and the new JPEG2000 standard Additional features include problems and solutions with each chapter to help you apply the theory and techniques, as well as bibliographies for researching specialized topics. With its extensive use of examples and illustrative figures, this is a superior title for students and practitioners in computer science, wireless and multimedia communications, and engineering.

Interval / Probabilistic Uncertainty and Non-classical Logics - Van-Nam Huynh 2008-01-11

This book contains the proceedings of the first International Workshop on Interval/Probabilistic Uncertainty and Non Classical Logics, Ishikawa, Japan, March 25-28, 2008. The workshop brought together researchers working on interval and probabilistic uncertainty and on non-classical logics. It is hoped this workshop will lead to a boost in the much-needed collaboration between the uncertainty analysis and non-classical logic communities, and thus, to better processing of uncertainty.