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**Database Systems for Advanced Applications**
Sourav S. Bhowmick 2014-04-01
These two volumes set LNCS 8421 and LNCS 8422 constitutes the refereed proceedings of the 19th International Conference on Database Systems for Advanced Applications, DASFAA 2014, held in Bali, Indonesia, in April 2014. The 62 revised full papers presented together with 1 extended abstract paper, 4 industrial papers, 6 demo presentations, 3 tutorials and 1 panel paper were carefully reviewed and selected from a total of 257 submissions. The papers cover the following topics: big data management, indexing and query processing, graph data management, spatio-temporal data management, database for emerging hardware, data mining, probabilistic and uncertain data management, web and social data management, security, privacy and trust, keyword search, data stream management and data quality.

**Introduction to Data Science and Machine Learning**
Keshav Sud 2020-03-25 Introduction to Data Science and Machine Learning has been created with the goal to provide beginners seeking to learn about data science, data enthusiasts, and experienced data professionals with a deep understanding of data science application development using open-source programming from start to finish. This book is divided into four sections: the first section contains an introduction to the book, the second covers the field of data science, software development, and open-source based embedded hardware; the third section covers algorithms that are the decision engines for data science applications; and the final section brings together the concepts shared in the first three sections and provides several examples of data science applications.

**An Improved K-means Clustering Algorithm For Data Mining**
Neha Aggarwal 2012 Data clustering is an unsupervised classification method aims at creating groups of objects, or clusters, in such a way that objects in the same cluster are very similar and objects in different clusters are quite distinct. K-means is an iterative algorithm in which the number of clusters must be determined before the execution. In this book an efficient k-means algorithm is proposed. Since, in each iteration, the k-means algorithm computes the distances between data point and all centers, this is computationally very expensive especially for huge data sets. For each data point, we can keep the distance to the nearest cluster. At the next iteration, we compute the distance to the previous nearest cluster. If the new distance is less than or equal to the previous distance, the point stays in its cluster, and there is no need to compute its distances to the other cluster centers. This saves the time required to compute distances to k 1 clusters. Experimental results show the accuracy and effectiveness of the proposed method.

**High Performance Data Mining**
Yike Guo 2007-05-08 High Performance Data Mining: Scaling Algorithms, Applications and Systems brings together in one place important contributions and up-to-date research results in this fast moving area. High Performance Data Mining: Scaling Algorithms, Applications and Systems serves as an excellent reference, providing insight into some of the most challenging research issues in the field.
an-efficient-k-means-clustering-method-and-its-application

**R in Action** - Robert I. Kabacoff 2015-05-20
Summary

R in Action, Second Edition presents both the R language and the examples that make it so useful for business developers. Focusing on practical solutions, the book offers a crash course in statistics and covers elegant methods for dealing with messy and incomplete data that are difficult to analyze using traditional methods. You'll also master R's extensive graphical capabilities for exploring and presenting data visually. And this expanded second edition includes new chapters on time series analysis, cluster analysis, and classification methodologies, including decision trees, random forests, and support vector machines. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology

Business pros and researchers thrive on data, and R speaks the language of data analysis. R is a powerful programming language for statistical computing. Unlike general-purpose tools, R provides thousands of modules for solving just about any data-crunching or presentation challenge you’re likely to face. R runs on all important platforms and is used by thousands of major corporations and institutions worldwide. About the Book

R in Action, Second Edition teaches you how to use the R language by presenting examples relevant to scientific, technical, and business developers. Focusing on practical solutions, the book offers a crash course in statistics, including elegant methods for dealing with messy and incomplete data. You'll also master R's extensive graphical capabilities for exploring and presenting data visually. And this expanded second edition includes new chapters on forecasting, data mining, and dynamic report writing. What's Inside

Complete R language tutorial Using R to manage, analyze, and visualize data Techniques for debugging programs and creating packages OOP in R Over 160 graphs About the Author

Dr. Rob Kabacoff is a seasoned researcher and teacher who specializes in data analysis. He also maintains the popular Quick-R website at statmethods.net. Table of Contents

PART 1 GETTING STARTED
Introduction to R Creating a dataset Getting started with graphs Basic data management Advanced data management

PART 2 BASIC METHODS
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PART 4 ADVANCED METHODS
Generalized linear models Principal components and factor analysis Time series Cluster analysis Classification

PART 5 EXPANDING YOUR SKILLS
Missing data

Advanced graphics with ggplot2
Advanced programming Creating a package Creating dynamic reports

Advanced graphics with the lattice package available online only from manning.com/kabacoff2

**Computational Science - ICCS 2020** - Valeria V. Krzhizhanovskaya 2020

The seven-volume set LNCS 12137, 12138, 12139, 12140, 12141, 12142, and 12143 constitutes the proceedings of the 20th International Conference on Computational Science, ICCS 2020, held in Amsterdam, The Netherlands, in June 2020.* The total of 101 papers and 248 workshop papers presented in this book set were carefully reviewed and selected from 719 submissions (230 submissions to the main track and 489 submissions to the workshops). The papers were organized in topical sections named: Part I: ICCS Main Track Part II: ICCS Main Track Part III: Advances in High-Performance Computational Earth Sciences: Applications and Frameworks; Agent-Based Simulations, Adaptive Algorithms and Solvers; Applications of Computational Methods in Artificial Intelligence and Machine Learning; Biomedical and Bioinformatics Challenges for Computer Science Part IV: Classifier Learning from Difficult Data; Complex Social Systems through the Lens of Computational Science; Computational Health; Computational Methods for Emerging Problems in (Dis-)Information Analysis Part V: Computational Optimization, Modelling and Simulation; Computational Science in IoT and Smart Systems; Computer Graphics, Image Processing and Artificial Intelligence Part VI: Data Driven Computational Sciences; Machine Learning and Data Assimilation for Dynamical Systems; Meshfree Methods in Computational Sciences; Multiscale Modelling and Simulation; Quantum Computing Workshop Part VII: Simulations of Flow and Transport: Modeling, Algorithms and Computation; Smart Systems: Bringing Together Computer Vision, Sensor Networks and Machine Learning; Software Engineering for Computational Science; Solving Problems with Uncertainties; Teaching Computational Science; UNcErtainty QUantificatiOn for ComputationAl modeLs *

The conference was canceled due to the COVID-19 pandemic.
Information Systems Security—Vinod Ganapathy 2018-12-10 This book constitutes the refereed proceedings of the 14th International Conference on Information Systems Security, ICISS 2018, held in Bangalore, India, in December 2018. The 23 revised full papers presented in this book together with 1 invited paper and 3 keynote abstracts were carefully reviewed and selected from 51 submissions. The papers are organized in the following topical sections: security for ubiquitous computing; modelling and analysis of attacks; smartphone security; cryptography and theory; enterprise and cloud security; machine learning and security; privacy; and client security and authentication.

Handbook of Research on Knowledge Management for Contemporary Business Environments—Malheiro, Armando 2018-05-25 Information is considered essential in every business model, which is why staying abreast of the latest resources can help combat many challenges and aid businesses in creating a synthesis between people and information, keeping up with evolving technologies, and keeping data accurate and secure. The Handbook of Research on Knowledge Management for Contemporary Business Environments is a critical scholarly publication that examines the management of knowledge resources in modern business contexts. Including a wide range of topics such as information systems, sustainable competitive advantage, and knowledge sharing, this publication is a vital reference source for managers, academicians, researchers, and students seeking current research on strategies that are able to manage the information in more than one context for present and future generations.

Computer Vision Methods for Fast Image Classification and Retrieval—Rafał Scherer 2019-01-29 The book presents selected methods for accelerating image retrieval and classification in large collections of images using what are referred to as ‘hand-crafted features.’ It introduces readers to novel rapid image description methods based on local and global features, as well as several techniques for comparing images. Developing content-based image comparison, retrieval and classification methods that simulate human visual perception is an arduous and complex process. The book’s main focus is on the application of these methods in a relational database context. The methods presented are suitable for both general-type and medical images. Offering a valuable textbook for upper-level undergraduate or graduate-level courses on computer science or engineering, as well as a guide for computer vision researchers, the book focuses on techniques that work under real-world large-dataset conditions.

Measuring Scholarly Impact—Ying Ding 2014-11-06 This book is an authoritative handbook of current topics, technologies and methodological approaches that may be used for the study of scholarly impact. The included methods cover a range of fields such as statistical sciences, scientific visualization, network analysis, text mining, and information retrieval. The techniques and tools enable researchers to investigate metric phenomena and to assess scholarly impact in new ways. Each chapter offers an introduction to the selected topic and outlines how the topic, technology or methodological approach may be applied to metrics-related research. Comprehensive and up-to-date, Measuring Scholarly Impact: Methods and Practice is designed for researchers and scholars interested in informetrics, scientometrics, and text mining. The hands-on perspective is also beneficial to advanced-level students in fields from computer science and statistics to information science.

Recent Advances in Computational Intelligence in Defense and Security—Rami Abielmona 2015-12-21 This volume is an initiative undertaken by the IEEE Computational Intelligence Society’s Task Force on Security, Surveillance and Defense to consolidate and disseminate the role of CI techniques in the design, development and deployment of security and defense solutions. Applications range from the detection of buried explosive hazards in a battlefield to the control of unmanned underwater vehicles, the delivery of superior video analytics for protecting critical infrastructures or the development of stronger intrusion detection systems and the design of military surveillance networks. Defense scientists, industry experts, academicians and practitioners alike will all benefit from the wide spectrum of successful applications compiled in...
this volume. Senior undergraduate or graduate students may also discover uncharted territory for their own research endeavors.

RoboCup 2013: Robot World Cup XVII-Sven Behnke 2014-07-16 This book includes the thoroughly refereed post-conference proceedings of the 17th Annual RoboCup International Symposium, held in Eindhoven, The Netherlands, in June 2013. The 20 revised papers presented together with 11 champion team papers, 3 best paper awards, 11 oral presentations, and 19 special track on open-source hard- and software papers were carefully reviewed and selected from 78 submissions. The papers present current research and educational activities within the fields of robotics and artificial intelligence with a special focus to robot hardware and software, perception and action, robotic cognition and learning, multi-robot systems, human-robot interaction, education and edutainment, and applications.

Proceedings of the International Conference on Artificial Intelligence and Computer Vision (AICV2020)-Aboul-Ella Hassanien 2020-03-23 This book presents the proceedings of the 1st International Conference on Artificial Intelligence and Computer Visions (AICV 2020), which took place in Cairo, Egypt, from April 8 to 10, 2020. This international conference, which highlighted essential research and developments in the fields of artificial intelligence and computer visions, was organized by the Scientific Research Group in Egypt (SRGE). The book is divided into sections, covering the following topics: swarm-based optimization mining and data analysis, deep learning and applications, machine learning and applications, image processing and computer vision, intelligent systems and applications, and intelligent networks.

Data Clustering in C++-Guojun Gan 2011-03-28 Data clustering is a highly interdisciplinary field, the goal of which is to divide a set of objects into homogeneous groups such that objects in the same group are similar and objects in different groups are quite distinct. Thousands of theoretical papers and a number of books on data clustering have been published over the past 50 years. However,

Combinatorial Optimization and Graph Algorithms-Takuro Fukunaga 2017-10-02 Covering network designs, discrete convex analysis, facility location and clustering problems, matching games, and parameterized complexity, this book discusses theoretical aspects of combinatorial optimization and graph algorithms. Contributions are by renowned researchers who attended NII Shonan meetings on this essential topic. The collection contained here provides readers with the outcome of the authors’ research and productive meetings on this dynamic area, ranging from computer science and mathematics to operations research. Networks are ubiquitous in today's world: the Web, online social networks, and search-and-query click logs can lead to a graph that consists of vertices and edges. Such networks are growing so fast that it is essential to design algorithms to work for these large networks. Graph algorithms comprise an area in computer science that works to design efficient algorithms for networks. Here one can work on theoretical or practical problems where implementation of an algorithm for large networks is needed. In two of the chapters, recent results in graph matching games and fixed parameter tractability are surveyed. Combinatorial optimization is an intersection of operations research and mathematics, especially discrete mathematics, which deals with new questions and new problems, attempting to find an optimum object from a finite set of objects. Most problems in combinatorial optimization are not tractable (i.e., NP-hard). Therefore it is necessary to design an approximation algorithm for them. To tackle these problems requires the development and combination of ideas and techniques from diverse mathematical areas including complexity theory, algorithm theory, and matroids as well as graph theory, combinatorics, convex and nonlinear optimization, and discrete and convex geometry. Overall, the book presents recent progress in facility location, network design, and discrete convex analysis.

Data Clustering-Charu C. Aggarwal 2018-09-03 Research on the problem of clustering tends to be fragmented across the pattern recognition, database, data mining, and machine learning communities. Addressing this problem in a unified way, Data Clustering: Algorithms and Applications provides complete coverage of the entire area of clustering, from basic methods to
more refined and complex data clustering approaches. It pays special attention to recent issues in graphs, social networks, and other domains. The book focuses on three primary aspects of data clustering: Methods, describing key techniques commonly used for clustering, such as feature selection, agglomerative clustering, partitional clustering, density-based clustering, probabilistic clustering, grid-based clustering, spectral clustering, and nonnegative matrix factorization Domains, covering methods used for different domains of data, such as categorical data, text data, multimedia data, graph data, biological data, stream data, uncertain data, time series clustering, high-dimensional clustering, and big data Variations and Insights, discussing important variations of the clustering process, such as semisupervised clustering, interactive clustering, multiview clustering, cluster ensembles, and cluster validation. In this book, top researchers from around the world explore the characteristics of clustering problems in a variety of application areas. They also explain how to glean detailed insight from the clustering process—including how to verify the quality of the underlying clusters—through supervision, human intervention, or the automated generation of alternative clusters.

**Advances on P2P, Parallel, Grid, Cloud and Internet Computing**
Fatos Xhafa 2016-10-21

P2P, Grid, Cloud and Internet computing technologies have been very fast established as breakthrough paradigms for solving complex problems by enabling aggregation and sharing of an increasing variety of distributed computational resources at large scale. The aim of this volume is to provide latest research findings, innovative research results, methods and development techniques from both theoretical and practical perspectives related to P2P, Grid, Cloud and Internet computing as well as to reveal synergies among such large scale computing paradigms. This proceedings volume presents the results of the 11th International Conference on P2P, Parallel, Grid, Cloud And Internet Computing (3PGCIC-2016), held November 5-7, 2016, at Soonchunhyang University, Asan, Korea.

**Unique Chips and Systems**
Eugene John
2018-10-08

Which came first, the system or the chip? While integrated circuits enable technology for the modern information age, computing, communication, and network chips fuel it. As soon as the integration ability of modern semiconductor technology offers presents opportunities, issues in power consumption, reliability, and form-factor present challenges. The demands of emerging software applications can only be met with unique systems and chips. Drawing on contributors from academia, research, and industry, Unique Systems and Chips explores unique approaches to designing future computing and communication chips and systems. The book focuses on specialized hardware and systems as opposed to general-purpose chips and systems. It covers early conception and simulation, mid-development, application, testing, and performance. The chapter authors introduce new ideas and innovations in unique aspects of chips and system design, then go on to provide in-depth analysis of these ideas. They explore ways in which these chips and systems may be used in further designs or products, spurring innovations beyond the intended scopes of those presented. International in flavor, the book brings industrial and academic perspectives into focus by presenting the full spectrum of applications of chips and systems.

**Guide to Ambient Intelligence in the IoT Environment**
Zaigham Mahmood 2019-01-01

Ambient intelligence (AmI) is an element of pervasive computing that brings smartness to living and business environments to make them more sensitive, adaptive, autonomous and personalized to human needs. It refers to intelligent interfaces that recognise human presence and preferences, and adjust smart environments to suit their immediate needs and requirements. The key factor is the presence of intelligence and decision-making capabilities in IoT environments. The underlying technologies include pervasive computing, ubiquitous communication, seamless connectivity of smart devices, sensor networks, artificial intelligence (AI), machine learning (ML) and context-aware human-computer interaction (HCI). AmI applications and scenarios include smart homes, autonomous self-driving vehicles, healthcare systems, smart roads, the industry sector, smart facilities management, the education sector, emergency services, and many more. The advantages of AmI in the IoT environment are extensive. However, as for any new technological paradigm, there are also many open issues and
limitations. This book discusses the AmI element of the IoT and the relevant principles, frameworks, and technologies in particular, as well as the benefits and inherent limitations. It reviews the state of the art of current developments relating to smart spaces and AmI-based IoT environments. Written by leading international researchers and practitioners, the majority of the contributions focus on device connectivity, pervasive computing and context modelling (including communication, security, interoperability, scalability, and adaptability). The book presents cutting-edge research, current trends, and case studies, as well as suggestions to further our understanding and the development and enhancement of the AmI-IoT vision.

Green Technology for Smart City and Society-Renu Sharma

Intelligent Agent Technology: Systems, Methodologies And Tools - Proceedings Of The 1st Asia-pacific Conference On Intelligent Agent Technology (Iat '99)-Liu Jiming 1999-11-05 This book is a collection of high quality technical papers contributed by active researchers and leading practitioners in intelligent agent technology. It offers a closer look at the state-of-the-art in the development of intelligent agents, and examines in depth the underlying logical, cognitive, physical, and biological foundations as well as the performance characteristics of various approaches in intelligent agent technology. It will stimulate the development of new models, new methodologies, and new tools for building a variety of embodiments of agent-based systems.

Hybrid Artificial Intelligent Systems-Francisco Martínez-Álvarez 2016-04-14 This volume constitutes the refereed proceedings of the 11th International Conference on Hybrid Artificial Intelligent Systems, HAIS 2016, held in Seville, Spain, in April 2016. The 63 full papers published in this volume were carefully reviewed and selected from 150 submissions. They are organized in topical sections on data mining and knowledge discovery; time series; bio-inspired models and evolutionary computation; learning algorithms; video and image; classification and cluster analysis; applications; bioinformatics; and hybrid intelligent systems for data mining and applications.

Scientific and Statistical Database Management-Michael Gertz 2010-06-17 This book constitutes the proceedings of the 22nd International Conference on Scientific and Statistical Database Management, SSSDM 2010, held in Heidelberg, Germany in June/July 2010. The 30 long and 11 short papers presented were carefully reviewed and selected from 94 submissions. The topics covered are query processing; scientific data management and analysis; data mining; indexes and data representation; scientific workflow and provenance; and data stream processing.


Advances in Knowledge Discovery and Data Mining-Pacific-Asia Conference on Knowledge Discovery and Data Mining 2003 s 2003-04-16 This book constitutes the refereed proceedings of the 7th Pacific-Asia Conference on Knowledge Discovery and Data Mining, PAKDD 2003, held in Seoul, Korea in April/Mai 2003. The 38 revised full papers and 20 revised short papers presented together with two invited industrial contributions were carefully reviewed and selected from 215 submissions. The papers are presented in topical sections on stream mining, graph mining, clustering, text mining, Bayesian networks, association rules, semi-structured data mining, classification, data analysis, and feature selection.

Expert System Techniques in Biomedical Science Practice-Pattnaik, Prasant Kumar 2018-06-01 Before the integration of expert systems in biomedical science, complex problems required human expertise to solve them through conventional procedural methods. Advancements in expert systems allow for knowledge to be extracted when no human expertise is available and increases productivity through quick diagnosis. Expert System Techniques in
Astronomy and Big Data-Kieran Jay Edwards
2014-04-12 With the onset of massive cosmological data collection through media such as the Sloan Digital Sky Survey (SDSS), galaxy classification has been accomplished for the most part with the help of citizen science communities like Galaxy Zoo. Seeking the wisdom of the crowd for such Big Data processing has proved extremely beneficial. However, an analysis of one of the Galaxy Zoo morphological classification data sets has shown that a significant majority of all classified galaxies are labelled as “Uncertain”. This book reports on how to use data mining, more specifically clustering, to identify galaxies that the public has shown some degree of uncertainty for as to whether they belong to one morphology type or another. The book shows the importance of transitions between different data mining techniques in an insightful workflow. It demonstrates that Clustering enables to identify discriminating features in the analysed data sets, adopting a novel feature selection algorithms called Incremental Feature Selection (IFS). The book shows the use of state-of-the-art classification techniques, Random Forests and Support Vector Machines to validate the acquired results. It is concluded that a vast majority of these galaxies are, in fact, of spiral morphology with a small subset potentially consisting of stars, elliptical galaxies or galaxies of other morphological variants.

Experimental Algorithms-Ralf Klasing
2012-05-28 This book constitutes the refereed proceedings of the 11th International Symposium on Experimental Algorithms, SEA 2012, held Bordeaux, France, in June 2012. The 31 revised full papers presented together with 3 invited papers were carefully reviewed and selected from 64 submissions and present current research in the area of design, analysis, and experimental evaluation and engineering of algorithms, as well as in various aspects of computational optimization and its applications.

Data Management, Analytics and Innovation-Neha Sharma 2020-08-18 This book presents the latest findings in the areas of data management and smart computing, big data management, artificial intelligence and data analytics, along with advances in network technologies. Gathering peer-reviewed research papers presented at the Fourth International Conference
on Data Management, Analytics and Innovation (ICDMAI 2020), held on 17-19 January 2020 at the United Services Institute (USI), New Delhi, India, it addresses cutting-edge topics and discusses challenges and solutions for future development. Featuring original, unpublished contributions by respected experts from around the globe, the book is mainly intended for a professional audience of researchers and practitioners in academia and industry.

**GeoSpatial Semantics**-Christophe Claramunt  
2011-05-04 This book constitutes the refereed proceedings of the 4th International Conference on GeoSpatial Semantics, GeoS 2011, held in Brest, France, in May 2011. The 13 papers presented together with 1 invited talk were carefully reviewed and selected from 23 submissions. The papers focus on formal and semantic approaches, time and activity-based patterns, ontologies, as well as quality, conflicts and semantic integration. They are organized in topical sections on ontologies and gazetteers, activity-based and temporal issues, models, quality and semantic similarities, and retrieval and discovery methods.

**Transactions on Large-Scale Data- and Knowledge-Centered Systems I**-Abdelkader Hameurlain  
2009-08-28 Data management, knowledge discovery, and knowledge processing are core and hot topics in computer science. They are widely accepted as enabling technologies for modern enterprises, enhancing their performance and their decision making processes. Since the 1990s the Internet has been the outstanding driving force for application development in all domains. An increase in the demand for resource sharing (e. g. , computing resources, s- vices, metadata, data sources) across different sites connected through networks has led to an evolution of data- and knowledge-management systems from centralized systems to decentralized systems enabling large-scale distributed applications prov- ing high scalability. Current decentralized systems still focus on data and knowledge as their main resource characterized by: heterogeneity of nodes, data, and knowledge autonomy of data and knowledge sources and services large-scale data volumes, high numbers of data sources, users, computing resources dynamicity of nodes These characteristics recognize: (i) limitations of methods and techniques developed for centralized systems (ii) requirements to extend or design new approaches and methods enhancing efficiency, dynamicity, and scalability (iii) development of large scale, experimental platforms and relevant benchmarks to evaluate and validate scaling Feasibility of these systems relies basically on P2P (peer-to-peer) techniques and agent systems supporting with scaling and decentralized control. Synergy between Grids, P2P systems and agent technologies is the key to data- and knowledge-centered systems in large-scale environments.

**Database Systems for Advanced Applications**-Sourav S. Bhowmick  
2014-04-16 These two volumes set LNCS 8421 and LNCS 8422 constitutes the refereed proceedings of the 19th International Conference on Database Systems for Advanced Applications, DASFAA 2014, held in Bali, Indonesia, in April 2014. The 62 revised full papers presented together with 1 extended abstract paper, 4 industrial papers, 6 demo presentations, 3 tutorials and 1 panel paper were carefully reviewed and selected from a total of 257 submissions. The papers cover the following topics: big data management, indexing and query processing, graph data management, spatio-temporal data management, database for emerging hardware, data mining, probabilistic and uncertain data management, web and social data management, security, privacy and trust, keyword search, data stream management and data quality.

**Intelligent Imaging and Analysis**-DaeEun Kim  
2020-03-05 Imaging and analysis are widely involved in various research fields, including biomedical applications, medical imaging and diagnosis, computer vision, autonomous driving, and robot controls. Imaging and analysis are now facing big changes regarding intelligence, due to the breakthroughs of artificial intelligence techniques, including deep learning. Many difficulties in image generation, reconstruction, de-noising skills, artifact removal, segmentation, detection, and control tasks are being overcome with the help of advanced artificial intelligence approaches. This Special Issue focuses on the latest developments of learning-based intelligent imaging techniques and subsequent analyses, which include photographic imaging, medical imaging, detection, segmentation, medical diagnosis, computer vision, and vision-based
robot control. These latest technological developments will be shared through this Special Issue for the various researchers who are involved with imaging itself, or are using image data and analysis for their own specific purposes.

Advanced Web Technologies and Applications-Jeffrey Xu Yu 2004-04-05 The Asia-Pacific region has emerged in recent years as one of the fastest growing regions in the world in the use of Web technologies as well as in making significant contributions to WWW research and development. Since the 1st Asia-Pacific Web conference in 1998, APWeb has continued to provide a forum for researchers, professionals, and industrial practitioners from around the world to share their rapidly evolving knowledge and to report new advances in WWW technologies and applications. APWeb 2004 received an overwhelming 386 full-paper submissions, including 375 research papers and 11 industrial papers from 20 countries and regions: Australia, Canada, China, France, Germany, Greece, Hong Kong, India, Iran, Japan, Korea, Norway, Singapore, Spain, Switzerland, Taiwan, Turkey, UK, USA, and Vietnam. Each submission was carefully reviewed by three members of the program committee. Among the 386 submitted papers, 60 regular papers, 24 short papers, 15 poster papers, and 3 industrial papers were selected to be included in the proceedings. The selected papers cover a wide range of topics including Web services, Web intelligence, Web personalization, Web query processing, Web caching, Web mining, text mining, data mining and knowledge discovery, XML database and query processing, work flow management, E-commerce, data re-housing, P2P systems and applications, Grid computing, and networking. The paper entitled “Towards Adaptive Probabilistic Search in Unstructured P2P - stems”, co-authored by Linhao Xu, Chenyun Dai, Wenyuan Cai, Shuigeng Zhou, and Aoying Zhou, was awarded the best APWeb 2004 student paper.

Advanced Data Mining and Applications-Jie Tang 2011-12-15 The two-volume set LNAI 7120 and LNAI 7121 constitutes the refereed proceedings of the 7th International Conference on Advanced Data Mining and Applications, ADMA 2011, held in Beijing, China, in December 2011. The 35 revised full papers and 29 short papers presented together with 3 keynote speeches were carefully reviewed and selected from 191 submissions. The papers cover a wide range of topics presenting original research findings in data mining, spanning applications, algorithms, software and systems, and applied disciplines.

Image Analysis-Arnt-Borre Salberg 2009-07-14 This volume contains the papers presented at the Scandinavian Conference on Image Analysis, SCIA 2009, which was held at the Radisson SAS Scandinavian Hotel, Oslo, Norway, June 15-18. SCIA 2009 was the 16th in the biennial series of conferences, which has been organized in turn by the Scandinavian countries Sweden, Finland, Denmark and Norway since 1980. The event itself has always attracted participants and author contributions from outside the Scandinavian countries, making it an international conference. The conference included a full day of tutorials and keynotes talks provided by world-renowned experts. The program covered high-quality scientific contributions within image analysis, human and action analysis, pattern and object recognition, color imaging and quality, medical and biological applications, face and head analysis, computer vision, and multispectral color analysis. The papers were carefully selected based on at least two reviews. Among 154 submissions 79 were accepted, leading to an acceptance rate of 51%. Since SCIA was arranged as a single-track event, 30 papers were presented in the oral sessions and 49 papers were presented in the poster sessions. A separate session on multispectral color science was organized in cooperation with the 11th Symposium of Multispectral Color Science (MCS 2009). Since 2009 was proclaimed the “International Year of Astronomy” by the United Nations General Assembly, the conference also contained a session on the topic “Image and Pattern Analysis in Astronomy and Astrophysics.” SCIA has a reputation of having a friendly environment, in addition to high-quality scientific contributions. We focused on maintaining this reputation, by designing a technical and social program that we hope the participants found interesting and inspiring for new research ideas and network extensions. We thank the authors for submitting their valuable work to SCIA.

Recent Trends in Information and Communication Technology-Faisal Saeed
This book presents 94 papers from the 2nd International Conference of Reliable Information and Communication Technology 2017 (IRICT 2017), held in Johor, Malaysia, on April 23–24, 2017. Focusing on the latest ICT innovations for data engineering, the book presents several hot research topics, including advances in big data analysis techniques and applications; mobile networks; applications and usability; reliable communication systems; advances in computer vision, artificial intelligence and soft computing; reliable health informatics and cloud computing environments, e-learning acceptance models, recent trends in knowledge management and software engineering; security issues in the cyber world; as well as society and information technology.

**Smart and Innovative Trends in Next Generation Computing Technologies** - Pushpak Bhattacharyya

The two-volume set CCIS 827 and 828 constitutes the thoroughly refereed proceedings of the Third International Conference on Next Generation Computing Technologies, NGCT 2017, held in Dehradun, India, in October 2017. The 135 full papers presented were carefully reviewed and selected from 948 submissions. There were organized in topical sections named: Smart and Innovative Trends in Communication Protocols and Standards; Smart and Innovative Trends in Computational Intelligence and Data Science; Smart and Innovative Trends in Natural Language Processing and Machine Vision; Smart Innovative Trends in Natural Language Processing for Indian Languages; Smart Innovative Trends in Security and Privacy.

**Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems** - Nicolas Beldiceanu

This book constitutes the refereed proceedings of the 9th International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, CPAIOR 2012, held in Nantes, France, in May/June 2012. The 26 revised full papers presented were carefully reviewed and selected from 64 submissions. The papers are focused on both theoretical and practical, application-oriented issues in combinatorial optimization and feature current research with a special focus on inference and relaxation methods, integration methods, modeling methods, innovative applications of CP/AI/OR techniques, and implementation of CP/AI/OR techniques and optimization systems.