

2013 Ieee Base Paper In Computer Science

The Internet of Things (IoT) has contributed greatly to the growth of data traffic on the Internet. Access technologies and object constraints associated with the IoT can cause performance and security problems. This relates to important challenges such as the control of radio communications and network access, the management of service quality and energy consumption, and the implementation of security mechanisms dedicated to the IoT. In response to these issues, this book presents new solutions for the management and control of performance and security in the IoT. The originality of these proposals lies mainly in the use of intelligent techniques. This notion of intelligence allows, among other things, the support of object heterogeneity and limited capacities as well as the vast dynamics characterizing the IoT. This book provides an overview of recent innovations and achievements in the broad areas of cyber-physical systems (CPS), including architecture, networking, systems, applications, security, and privacy. The book discusses various new CPS technologies from diverse aspects to enable higher level of innovation towards intelligent life. The book provides insight to the future integration, coordination and interaction between the physical world, the information world, and human beings. The book features contributions from renowned researchers and engineers, who discuss key issues from various perspectives, presenting opinions and recent CPS-related achievements. Investigates how to advance the development of cyber-physical systems Provides a joint consideration of other newly emerged technologies and concepts in relation to CPS like cloud computing, big data, fog computing, and crowd sourcing Includes topics related to CPS such as architecture, system, networking, application, algorithm, security and privacy

The book presents a collection of peer-reviewed articles from the International Conference on Advances and Applications of Artificial Intelligence and Machine Learning - ICAAIML 2020. The book covers research in artificial intelligence, machine learning, and deep learning applications in healthcare, agriculture, business, and security. This volume contains research papers from academicians, researchers as well as students. There are also papers on core concepts of computer networks, intelligent system design and deployment, real-time systems, wireless sensor networks, sensors and sensor nodes, software engineering, and image processing. This book will be a valuable resource for students, academics, and practitioners in the industry working on AI applications.

This book provides a comprehensive review of the state-of-the art of optical signal processing technologies and devices. It presents breakthrough solutions for enabling a pervasive use of optics in data communication and signal storage applications. It presents presents optical signal processing as solution to overcome the capacity crunch in communication networks. The book content ranges from the development of innovative materials and devices, such as graphene and slow light structures, to the use of nonlinear optics for secure quantum information processing and overcoming the classical Shannon limit on channel capacity and microwave signal processing. Although it holds the promise for a substantial speed improvement, today's communication infrastructure optics remains largely confined to the signal transport layer, as it lags behind electronics as far as signal processing is concerned. This situation will change in the near future as the tremendous growth of data traffic requires energy efficient and fully transparent all-optical networks. The book is written by leaders in the field.

Proceedings of IEMIS 2018, Volume 2

Applications of Artificial Intelligence and Machine Learning

Proceedings of the 2018 COPS Volume II: Signal Processing

Testbeds and Research Infrastructure: Development of Networks and Communities

Communications, Signal Processing, and Systems

Research Anthology on Emerging Technologies and Ethical Implications in Human Enhancement

Resource Management in Mobile Computing Environments

The volume LNCS 8866 constitutes the refereed proceedings of the 11th International Symposium on Neural Networks, ISSN 2014, held in Hong Kong and Macao, China on November/ December 2014. The 71 revised full papers presented were carefully reviewed and selected from 119 submissions. These papers cover all major topics of the theoretical research, empirical study and applications of neural networks research as follows. The focus is on following topics such as analysis, modeling, and applications. Artificial intelligence (AI) is revolutionizing every aspect of human life including human healthcare and wellbeing management. Various types of intelligent healthcare engineering applications have been created that help to address patient healthcare and outcomes such as identifying diseases and gathering patient information. Advancements in AI applications in healthcare continue to be sought to aid rapid disease detection, health monitoring, and prescription drug tracking. The Handbook of Research on Advancements of Artificial Intelligence in Healthcare Engineering is an essential scholarly publication that provides comprehensive research on the possible applications of machine learning, deep learning, soft computing, and evolutionary computing techniques in the design, implementation, and optimization of healthcare engineering solutions. Featuring a wide

range of topics such as genetic algorithms, mobile robotics, and neuroinformatics, this book is ideal for engineers, technology developers, IT consultants, hospital administrators, academicians, healthcare professionals, practitioners, researchers, and students.

This book aims to examine innovation in the fields of computer engineering and networking. The book covers important emerging topics in computer engineering and networking, and it will help researchers and engineers improve their knowledge of state-of-art in related areas. The book presents papers from the 4th International Conference on Computer Engineering and Networks (CENet2014) held July 19-20, 2014 in Shanghai, China.

Intelligent IoT Systems in Personalized Health Care delivers a significant forum for the technical advancement of IoMT learning in parallel computing environments across biomedical engineering diversified domains and its applications. Pursuing an interdisciplinary approach, the book focuses on methods used to identify and acquire valid, potentially useful knowledge sources. The book presents novel, in-depth, fundamental research contributions from a methodological/application perspective to help readers understand the fusion of AI with IoT and its capabilities in solving a diverse range of problems for biomedical engineering and its real-world personalized health care applications. The book is well suited for researchers exploring the significance of IoT based architecture to perform predictive analytics of user activities in sustainable health. Presents novel, in-depth, fundamental research contributions from a methodological/application perspective to help readers understand the fusion of AI with IoT Illustrates state-of-the-art developments in new theories and applications of IoMT techniques as applied to parallel computing environments in biomedical engineering systems Presents concepts and technologies successfully used in the implementation of today's intelligent data-centric IoT systems and Edge-Cloud-Big data

Emerging Technologies in Data Mining and Information Security

Engineering Applications of Neural Networks

Handbook of Research on Advanced Trends in Microwave and Communication Engineering

9th International ICST Conference, TridentCom 2014, Guangzhou, China, May 5-7, 2014, Revised Selected Papers

A Comprehensive Approach

29th International Conference on Industrial Engineering and Other Applications of Applied Intelligent Systems, IEA/AIE 2016, Morioka, Japan, August 2-4, 2016, Proceedings

This book addresses the impacts of various types of services such as infrastructure, platforms, software, and business processes that cloud computing and Big Data have introduced into business. Featuring chapters which discuss effective and efficient approaches in dealing with the inherent complexity and increasing demands in data science, a variety of application domains are covered. Various case studies by data management and analysis experts are presented in these chapters. Covered applications include banking, social networks, bioinformatics, healthcare, transportation and criminology. Highlighting the Importance of Big Data Management and Analysis for Various Applications will provide the reader with an understanding of how data management and analysis are adapted to these applications. This book will appeal to researchers and professionals in the field.

The 3rd International Conference on Foundations and Frontiers in Computer, Communication and Electrical Engineering is a notable event which brings together academia, researchers, engineers and students in the fields of Electronics and Communication, Computer and Electrical Engineering making the conference a perfect platform to share experience, f Technology has been hailed as one of the catalysts toward economic and human development. In the current economic era of the Fourth Industrial Revolution, information acquisition, transformation, and dissemination processes are posed to be the key enablers of development. However, in the context of developing countries, there is a need for more evidence on the impact that ICT has on addressing developmental issues. Such evidence is needed to make a case for investments in ICT-led interventions to improve people's lives in developing countries. Perspectives on ICT4D and Socio-Economic Growth Opportunities in Developing Countries is a collection of innovative research on current trends that portray the ICT and development nexus (ICT4D) from economic and human development perspectives within developing countries. While highlighting topics including mobile money, poverty alleviation, and consumer behavior, this book is ideally designed for economists, government officials, policymakers, ICT specialists, business professionals, researchers, academicians, students, and entrepreneurs.

This book provides a timely and comprehensive overview of the introduction of LTE technology for PPDR communications. It describes the operational scenarios and emerging multimedia and data-centric applications in demand and discusses the main techno-economic drivers that are believed to be pivotal for an efficient and cost-effective delivery of mobile broadband PPDR communications. The capabilities and features of the LTE standard for improved support of mission-critical communications (e.g., proximity services, group communications) are covered in detail. Also, different network implementation options to deliver mobile broadband PPDR communications services over dedicated or commercial LTE-based networks are discussed, including the applicability of the Mobile Virtual Network Operator (MVNO) model and other hybrid models. Radio spectrum matters are also discussed in depth, outlining spectrum needs and providing an outlook into allocated and candidate spectrum bands for PPDR communications and suitable dynamic spectrum sharing solutions in PPDR communications. Explanations are accompanied by a vast collection of references that allow the more intrigued reader to gain further insight into the addressed topics.

Highlighting the Importance of Big Data Management and Analysis for Various Applications

Advances in Neural Networks – ISNN 2014

Sensor Signal and Information Processing II

Handbook of Research on Advancements of Artificial Intelligence in Healthcare Engineering

mmWave Massive MIMO

Paper-Based Medical Diagnostic Devices

Research Anthology on Architectures, Frameworks, and Integration Strategies for Distributed and Cloud Computing

This book provides an overview of the research work on data privacy and privacy enhancing technologies carried by the participants of the ARES project. ARES (Advanced Research in Privacy and Security, CSD2007-00004) has been one of the most important research projects funded by the Spanish Government in the fields of computer security and privacy. It is part of the now extinct CONSOLIDER INGENIO 2010 program, a highly competitive program which aimed to advance knowledge and open new research lines among top Spanish research groups. The project started in 2007 and will finish this 2014. Composed by 6 research groups from 6 different institutions, it has gathered an important number of researchers during its lifetime. Among the work produced by the ARES project, one specific work package has been related to privacy. This book gathers works produced by members of the project related to data privacy and privacy enhancing technologies. The presented works not only summarize important research carried in the project but also serve as an overview of the state of the art in current research on data privacy and privacy enhancing technologies.

This book reports the latest advances on the design and development of mobile computing systems, describing their applications in the context of modeling, analysis and efficient resource management. It explores the challenges on mobile computing and resource management paradigms, including research efforts and approaches recently carried out in response to them to address future open-ended issues. The book includes 26 rigorously refereed chapters written by leading international researchers, providing the readers with technical and scientific information about various aspects of mobile computing, from basic concepts to advanced findings, reporting the state-of-the-art on resource management in such environments. It is mainly intended as a reference guide for researchers and practitioners involved in the design, development and applications of mobile computing systems, seeking solutions to related issues. It also represents a useful textbook for advanced undergraduate and graduate courses, addressing special topics such as: mobile and ad-hoc wireless networks; peer-to-peer systems for mobile computing; novel resource management techniques in cognitive radio networks; and power management in mobile computing systems.

2013 IEEE International Symposium on Signal Processing and Information Technology(ISSPIT)

This book constitutes the refereed proceedings of the 18th International Conference on Engineering Applications of Neural Networks, EANN 2017, held in Athens, Greece, in August 2017. The 40 revised full papers and 5 revised short papers presented were carefully reviewed and selected from 83 submissions. The papers cover the topics of deep learning, convolutional neural networks, image processing, pattern recognition, recommendation systems, machine learning, and applications of Artificial Neural Networks (ANN) applications in engineering, 5G telecommunication networks, and audio signal processing. The volume also includes papers presented at the 6th Mining Humanistic Data Workshop (MHDW 2017) and the 2nd Workshop on 5G-Putting Intelligence to the Network Edge (5G-PINE).

Current Advances in Soft Robotics: Best Papers From RoboSoft 2018

Robotic Systems: Concepts, Methodologies, Tools, and Applications

Handbook of Research on Design, Control, and Modeling of Swarm Robotics

Intelligent IoT Systems in Personalized Health Care

2013 IEEE International Symposium on Signal Processing and Information Technology(ISSPIT)

Cyber-Physical Systems: Architecture, Security and Application

Perspectives on ICT4D and Socio-Economic Growth Opportunities in Developing Countries

The IEEE ISSPIT 2013 is the thirteenth in a series of international symposia aiming at the coverage of key aspects in the fields of signal processing and information technology Sessions will include tutorials in addition to presentations on new research results Papers describing original work are invited in any of the areas of Information Technology and Signal Processing as outlined below Accepted papers will be published in the Proceedings of IEEE ISSPIT 2013, while acceptance will be based on paper quality, relevance, and originality A contest for the Best Paper Award will be held and an award will be given

Through expanded intelligence, the use of robotics has fundamentally transformed a variety of fields, including manufacturing, aerospace, medicine, social services, and agriculture. Continued research on robotic design is critical to solving various dynamic obstacles individuals, enterprises, and humanity at large face on a daily basis. Robotic Systems: Concepts, Methodologies, Tools, and Applications is a vital reference source that delves into the current issues, methodologies, and trends relating to advanced robotic technology in the modern world. Highlighting a range of topics such as mechatronics, cybernetics, and human-computer interaction, this multi-volume book is ideally designed for robotics engineers, mechanical engineers, robotics technicians, operators, software engineers, designers, programmers, industry professionals, researchers, students, academicians, and computer practitioners seeking current research on developing innovative ideas for intelligent and autonomous robotics systems.

With the increasing worldwide trend in population migration into urban centers, we are beginning to see the emergence of the kinds of mega-cities which were once the stuff of science fiction. It is clear to most urban planners and developers that accommodating the needs of the tens of millions of inhabitants of those megalopolises in an orderly and uninterrupted manner will require the seamless integration of and real-time monitoring and response services for public utilities and transportation systems. Part speculative look into the future of the world ' s urban centers, part technical blueprint, this visionary book helps lay the groundwork for the communication networks and services on which tomorrow ' s “ smart cities ” will run. Written by a uniquely well-qualified author team, this

book provides detailed insights into the technical requirements for the wireless sensor and actuator networks required to make smart cities a reality.

This book constitutes the thoroughly refereed post-workshop proceedings of the Third IAPR TC3 Workshop on Pattern Recognition of Social Signals in Human-Computer-Interaction, MPRSS 2014, held in Stockholm, Sweden, in August 2014, as a satellite event of the International Conference on Pattern Recognition, ICPR 2014. The 14 revised papers presented focus on pattern recognition, machine learning and information fusion methods with applications in social signal processing, including multimodal emotion recognition, user identification, and recognition of human activities.

Mobile Broadband Communications for Public Safety

Proceedings of ICRTCIS 2019

11th International Symposium on Neural Networks, ISNN 2014, Hong Kong and Macao, China, November 28 -- December 1, 2014. Proceedings
CENet2014

Recent Trends in Communication and Intelligent Systems

Cognitive Radio, Mobile Communications and Wireless Networks

Third IAPR TC3 Workshop, MPRSS 2014, Stockholm, Sweden, August 24, 2014, Revised Selected Papers

Along with the introduction of technology in nearly every facet of human life comes the question of the ethical side of using technology to improve the human condition that be physically or mentally. The capabilities of human enhancement technologies have created a dual-sided approach to discussing human enhancement: the critical of attempting to reach human perfection and the ethics within that idea and the endless capabilities of technology that have greatly impacted the medical field. It is to discuss both aspects within these emerging technologies, whether as separate entities or as cohesive units. Ranging from disease detection and treatment to implant prosthetics to robotics and genetic engineering, human enhancement technologies are widespread and multi-purposed. By going beyond the capabilities of human hand technologies have propelled modern medicine and healthcare to new levels that have allowed humans to face new treatments or assistive technologies not seen before. Research Anthology on Emerging Technologies and Ethical Implications in Human Enhancement covers the primary technologies and tools being used in medicine and healthcare along with discussions on the ethics of enhancing the human body. Topics covered include prosthetics and implants, robotics, human disorders/diseases and treatments and smart technologies, along with law and theory. This publication serves as a valuable reference work for doctors, medical professionals, researchers, students, professionals, and practitioners involved in fields that include ethics, medicine, computer science, robotics, genetics, assistive technologies, nanotechnology, biomedical engineering, and biotechnology.

The relentless advances in all areas of information and communication technology, intelligent systems, and related domains have continued to drive innovative research. These works have attempted to contribute in some form towards improving human life in general and have become indispensable elements of our day-to-day lives. The continues at an accelerated pace while the world faces innumerable challenges and rapid advances in artificial intelligence, wireless communication, sensors, cloud and computing, and biomedical sciences. These advances must be documented and studied further in order to ensure society's continual development. The Handbook of Research on Evolving Designs and Innovation in ICT and Intelligent Systems for Real-World Applications disseminates details of works undertaken by various groups of researchers in emerging areas related to information and communication technology, electronics engineering, intelligent systems, and allied disciplines with real-world applications. Covering a wide range of topics such as augmented reality and wireless sensor networks, this major reference work is ideal for industry professionals, researchers, scholars, practitioners, academicians, engineers, instructors, and students.

Fundamentals of 5G Mobile Networks provides an overview of the key features of the 5th Generation (5G) mobile networks, discussing the motivation for 5G and the challenges in developing this new technology. This book provides an insight into the key areas of research that will define this new system technology paving the path for future research and development. The book is multi-disciplinary in nature, and aims to cover a whole host of intertwined subjects that will predominantly influence the 5G landscape, including Future Internet, cloud computing, small cells and self-organizing networks (SONs), cooperative communications, dynamic spectrum management and cognitive radio, Broadcast-Broadband convergence, 5G security challenge, and green RF. The book aims to be the first of its kind towards painting a holistic perspective on 5G Mobile, allowing 5G stakeholders to capture key technology trends on different layering domains and to identify potential inter-disciplinary design aspects that need to be addressed in order to deliver a 5G Mobile system that operates seamlessly as a piece of the 5G networking jigsaw. Key features: • Addresses the fundamentals of 5G mobile networks serving as a useful study guide for mobile researchers and system engineers aiming to position their research in this fast evolving arena. • Develops the Small cells together with next-generation SON (self-organizing networks) systems as solutions for addressing the unprecedented traffic demand and variations across cells. • Elaborates Mobile Cloud technology and Services for future communication platforms, acting as a source of inspiration for corporations looking for new business models to harness the 5G wave. • Discusses the open issues facing broad-scale commercial deployment of white space networks, including the potential for applications to be part of the future 5G standard. • Provides a scientific assessment for broadcast and mobile broadband convergence coupled together with a 'win-win' convergence solution to ha

the broadcasting and mobile industry. • Describes the key components, trends and challenges, as well as the system requirements for 5G transceivers to support multi-standard radio, a source of inspiration for RF engineers and vendors to tie down the requirements and potential solutions for next generation handsets. This book disseminates information on paper-based diagnostics devices and describes novel paper materials, fabrication techniques, and Basic Paper-based microfluidics/electronics theory. The section on sample preparation, paper-based electronics/sensors for developing paper-based point-of-care (POC) systems also contains detailed descriptions. In the application sections this book covers sensing technique for DNA/RNA, bacteria/virus and integration of lateral flow assay. The book provides understanding and knowledge of paper-based diagnostic device development in terms of concept, materials, fabrication and applications.

Multimodal Pattern Recognition of Social Signals in Human-Computer-Interaction

Select Proceedings of ICAAAIML 2020

Handbook of Research on Evolving Designs and Innovation in ICT and Intelligent Systems for Real-World Applications

ISM 2013 : 9-11 December 2013, Anaheim, California, USA.

Concepts, Methodologies, Tools, and Applications

18th International Conference, EANN 2017, Athens, Greece, August 25–27, 2017, Proceedings

Trends in Applied Knowledge-Based Systems and Data Science

Studies on robotics applications have grown substantially in recent years, with swarm robotics being a relatively new area of research. Inspired by studies in swarm intelligence and robotics, swarm robotics facilitates interactions between robots as well as their interactions with the environment. The Handbook of Research on Design, Control, and Modeling of Swarm Robotics is a collection of the most important research achievements in swarm robotics thus far, covering the growing areas of design, control, and modeling of swarm robotics. This handbook serves as an essential resource for researchers, engineers, graduates, and senior undergraduates with interests in swarm robotics and its applications.

This book provides an overview of the latest research and development of new technologies for cognitive radio, mobile communications, and wireless networks. The contributors discuss the research and requirement analysis and initial standardization work towards 5G cellular systems and the capacity problems it presents. They show how cognitive radio, with the capability to flexibly adapt its parameters, has been proposed as the enabling technology for unlicensed secondary users to dynamically access the licensed spectrum owned by legacy primary users on a negotiated or an opportunistic basis. They go on to show how cognitive radio is now perceived in a much broader paradigm that will contribute to solve the resource allocation problem that 5G requirements raise. The chapters represent hand-selected expanded papers from EAI sponsored and hosted conferences such as the 12th EAI International Conference on Mobile and Ubiquitous Systems, the 11th EAI International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness, the 10th International Conference on Cognitive Radio Oriented Wireless Networks, the 8th International Conference on Mobile Multimedia Communications, and the EAI International Conference on Software Defined Wireless Networks and Cognitive Technologies for IoT. The book gathers the best research papers presented at the International Conference on Recent Trends in Communication and Intelligent Systems (ICRTCIS 2019), organized by Rajasthan Technical University Kota, and Arya College of Engineering and IT, Jaipur, on 8–9 June 2019. It discusses the latest technologies in communication and intelligent systems, covering various areas of communication engineering, such as signal processing, VLSI design, embedded systems, wireless communications, and electronics and communications in general. Featuring work by leading researchers and technocrats, the book serves as a valuable reference resource for young researchers and academics as well as practitioners in industry.

In the current age of information explosion, newly invented technological sensors and software are now tightly integrated with our everyday lives. Many sensor processing algorithms have incorporated some forms of computational intelligence as part of their core framework in problem solving. These algorithms have the capacity to generalize and discover knowledge for themselves and learn new information whenever unseen data are captured. The primary aim of sensor processing is to develop techniques to interpret, understand, and act on information contained in the data. The interest of this book is in developing intelligent signal processing in order to pave the way for smart sensors. This involves mathematical advancement of nonlinear signal processing theory and its applications that extend far beyond traditional techniques. It bridges the boundary between theory and application, developing novel theoretically inspired methodologies targeting both longstanding and emergent signal processing applications. The topic ranges from phishing detection to integration of terrestrial laser scanning, and from fault diagnosis to bio-inspired filtering. The book will appeal to established practitioners, along with researchers and students in the emerging field of smart sensors processing.

Proceedings, 2013 IEEE International Symposium on Multimedia

Human-in-the-Loop Robot Control and Learning

Transportation and Power Grid in Smart Cities

10th International Symposium, FPS 2017, Nancy, France, October 23-25, 2017, Revised Selected Papers

Data Communication and Storage Applications

Foundations and Frontiers in Computer, Communication and Electrical Engineering

All-Optical Signal Processing

Distributed systems intertwine with our everyday lives. The benefits and current shortcomings of the underpinning technologies are experienced by a wide range of people and their smart devices. With the rise of large-scale IoT and similar distributed systems, cloud bursting technologies, and partial outsourcing solutions, private entities are encouraged to increase their efficiency and offer unparalleled availability and reliability to their users. The Research Anthology on Architectures, Frameworks, and Integration Strategies for Distributed and Cloud Computing is a vital reference source that provides valuable insight into current and emergent research occurring within the field of distributed computing. It also presents architectures and service frameworks to achieve highly integrated distributed systems and solutions to integration and efficient management challenges faced by current and future distributed systems. Highlighting a range of topics such as data sharing, wireless sensor networks, and scalability, this multi-volume book is ideally designed for system administrators, integrators, designers, developers, researchers, academicians, and students.

The book features research papers presented at the International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2018) held at the University of Engineering & Management, Kolkata, India, on February 23 – 25, 2018. It comprises high-quality research by academics and industrial experts in the field of computing and communication, including full-length papers, research-in-progress papers, case studies related to all the areas of data mining, machine learning, IoT and information security.

This book constitutes the proceedings of the 9th International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities, TridentCom 2014, held in Guangzhou, China, in May 2014. The 49 revised full papers presented were carefully selected out of 149 submissions. The conference consisted of 6 symposia covering topics such as testbed virtualization, Internet of Things, vehicular networks, SDN, NDN, large-scale testbed federation, mobile networks, wireless networks. In the past years there has been considerable effort to move robots from industrial environments to our daily lives where they can collaborate and interact with humans to improve our life quality. One of the key challenges in this direction is to make a suitable robot control system that can adapt to humans and interactively learn from humans to facilitate the efficient and safe co-existence of the two. The applications of such robotic systems include: service robotics and physical human-robot collaboration, assistive and rehabilitation robotics, semi-autonomous cars, etc. To achieve the goal of integrating robotic systems into these applications, several important research directions must be explored. One such direction is the study of skill transfer, where a human operator's skilled executions are used to obtain an autonomous controller. Another important direction is shared control, where a robotic controller and humans control the same body, tool, mechanism, car, etc. Shared control, in turn invokes very rich research questions such as co-adaptation between the human and the robot, where the two agents can benefit from each other's skills or must adapt to each other's behavior to achieve effective cooperative task executions. The aim of this Research Topic is to help bridge the gap between the state-of-the-art and above-mentioned goals through novel multidisciplinary approaches in human-in-the-loop robot control and learning.

Handbook of Research on End-to-End Cloud Computing Architecture Design

As a Part of Bioanalysis-Advanced Materials, Methods, and Devices

Communication Networks and Services

A Paradigm for 5G

Hybrid PET/MR Neuroimaging

Proceedings of the 4th International Conference on Computer Engineering and Networks

The Road Ahead Through LTE Technology

Cloud computing has become integrated into all sectors, from business to quotidian life. Since it has revolutionized modern computing, there is a need for updated research related to the architecture and frameworks necessary to maintain its efficiency. The Handbook of Research on End-to-End Cloud Computing Architecture Design provides architectural design and implementation studies on cloud computing from an end-to-end approach, including the latest industrial works and extensive research studies of cloud computing. This handbook enumerates deep dive and systemic studies of cloud computing from architecture to implementation. This book is a comprehensive publication ideal for programmers, IT professionals, students, researchers, and engineers.

mmWave Massive MIMO: A Paradigm for 5G is the first book of its kind to hinge together related discussions on mmWave and Massive MIMO under the umbrella of 5G networks. New networking scenarios are identified, along with fundamental design requirements for mmWave Massive MIMO networks from an architectural and practical perspective. Working towards final deployment, this book updates the research community on the current mmWave Massive MIMO roadmap, taking into account the future emerging technologies emanating from 3GPP/IEEE. The book's editors draw on their vast experience in international research on the forefront of the mmWave Massive MIMO research arena and standardization. This book aims to talk openly about the topic, and will serve as a useful reference not only for postgraduates students to learn more on this evolving field, but also as inspiration for mobile communication researchers who want to make further innovative strides in the field to mark their legacy in the 5G arena. Contains tutorials on the basics of mmWave and Massive MIMO Identifies new 5G networking scenarios, along with design requirements from an architectural and practical perspective Details the latest updates on the evolution of the mmWave Massive MIMO roadmap, considering future emerging technologies emanating from 3GPP/IEEE Includes contributions from leading experts in the field in modeling and prototype design for mmWave Massive MIMO design Presents an ideal reference that not only helps postgraduate students learn more in this evolving field, but also inspires mobile communication researchers towards further innovation

This book brings together papers from the 2018 International Conference on Communications, Signal Processing, and Systems, which was held in Dalian, China on July 14–16, 2018. Presenting the latest developments and discussing the interactions and links between these multidisciplinary fields, the book spans topics ranging from communications, signal processing and systems. It is aimed at undergraduate and graduate electrical engineering, computer science and mathematics students, researchers and engineers from academia and industry as well as government employees.

This book constitutes the refereed conference proceedings of the 29th International Conference on Industrial, Engineering and Other Applications of

Applied Intelligent Systems, IEA/AIE 2016, held in Morioka, Japan, in August 2-4, 2016. The 80 revised full papers presented were carefully reviewed and selected from 168 submissions. They are organized in topical sections: data science; knowledge base systems; natural language processing and sentiment analysis; semantic Web and social networks; computer vision; medical diagnosis system and bio-informatics; applied neural networks; innovations in intelligent systems and applications; decision support systems; adaptive control; soft computing and multi-agent systems; evolutionary algorithms and heuristic search; system integration for real-life applications.

Intelligent Security Management and Control in the IoT

Proceedings of the 3rd International Conference C2E2, Mankundu, West Bengal, India, 15th-16th January, 2016.

Fundamentals of 5G Mobile Networks

Foundations and Practice of Security

Advanced Research in Data Privacy

Wireless communications have become invaluable in the modern world. The market is going through a revolutionary transformation as new technologies and standards endeavor to keep up with demand for integrated and low-cost mobile and wireless devices. Due to their ubiquity, there is also a need for a simplification of the design of wireless systems and networks. The Handbook of Research on Advanced Trends in Microwave and Communication Engineering showcases the current trends and approaches in the design and analysis of reconfigurable microwave devices, antennas for wireless applications, and wireless communication technologies. Outlining both theoretical and experimental approaches, this publication brings to light the unique design issues of this emerging research, making it an ideal reference source for engineers, researchers, graduate students, and IT professionals.

This book constitutes revised selected papers from the 10th International Symposium on Foundations and Practice of Security, FPS 2017, held in Nancy, France in October 2017. The 20 papers presented in this volume were carefully reviewed and selected from 53 submissions. The papers were organized in topical sections named: access control; formal verification; privacy; physical security; network security, encrypted DBs and blockchain; vulnerability analysis and deception systems; and defence against attacks and anonymity.