

Nustedupk Sample Papers

This book includes key insights that reflect 'Advances in Computer and Computational Sciences' from upcoming researchers and leading academics around the globe. It gathers high-quality, peer-reviewed papers presented at the International Conference on Computer, Communication and Computational Sciences (IC4S 2018), which was held on 20-21 October, 2018 in Bangkok. The book covers a broad range of topics, including intelligent hardware and software design, advanced communications, intelligent computing techniques, intelligent image processing, and web and informatics. Its goal is to familiarize readers from the computer industry and academia with the latest advances in next-generation computer and communication technology, which they can subsequently integrate into real-world applications.

This book constitutes the refereed proceedings of the 25th International Conference on Information and Software Technologies, ICIST 2019, held in Vilnius, Lithuania, in October 2019. The 46 papers presented were carefully reviewed and selected from 121 submissions. The papers are organized in topical sections on information systems; business intelligence for information and software systems; information technology applications; software engineering.

This book constitutes the thoroughly refereed proceedings of the 9th International Congress on Telematics and Computing, WITCOM 2020, held in Puerto Vallarta, Mexico, in November 2020. Due to the COVID-19 pandemic the conference was held online. The 28 full papers and 3 short papers in this volume were carefully reviewed and selected from 79 submissions. The papers are focused on the topics of deep and machine learning, cybersecurity, wireless networks, computer vision, communications, and education applied to different sceneries of study and COVID-19.

The four-volume set LNCS 7333-7336 constitutes the refereed proceedings of the 12th International Conference on Computational Science and Its Applications, ICCSA 2012, held in Salvador de Bahia, Brazil, in June 2012. The four volumes contain papers presented in the following workshops: 7333 - advances in high performance algorithms and applications (AHPAA); bioinspired computing and applications (BIOCA); computational geometry and applicatons (CGA); chemistry and materials sciences and technologies (CMST); cities, technologies and planning (CTP); 7334 - econometrics and multidimensional evaluation in the urban environment (EMEUE); geographical analysis, urban modeling, spatial statistics (Geo-An-Mod); 7335 - optimization techniques and applications (OTA); mobile communications (MC); mobile-computing, sensind and actuation for cyber physical systems (MSA4CPS); remote sensing (RS); 7336 - software engineering processes and applications (SEPA); software quality (SQ); security and privacy in computational sciences (SPCS); soft computing and data engineering (SCDE). The topics of the fully refereed papers are structured according to the four major conference themes: 7333 - computational methods, algorithms and scientific application; 7334 - geometric modelling, graphics and visualization; 7335 - information systems and technologies; 7336 - high performance computing and networks.

16th Scandinavian Conference, SCIA 2009, Oslo, Norway, June 15-18, Proceedings

7th International Workshop, CyPhy 2017, Seoul, South Korea, October 15-20, 2017, Revised Selected Papers

*12th International Semantic Web Conference, Sydney, NSW, Australia, October 21-25, 2013, Proceedings, Part I
The Semantic Web - ISWC 2013*

19th International Conference, CISIM 2020, Bialystok, Poland, October 16–18, 2020, Proceedings

Proceedings of the 11th International Conference on Robotics, Vision, Signal Processing and Power Applications

Intelligent Systems and Applications

This book introduces a variety of treatment technologies, such as physical, chemical, and biological methods for the treatment of gas emissions, wastewater, and solid waste. It provides a useful source of information for engineers and specialists, as well as for undergraduate and postgraduate students, in the areas of environmental science and engineering.

The book presents a remarkable collection of chapters covering a wide range of topics in the areas of intelligent systems and artificial intelligence, and their real-world applications. It gathers the proceedings of the Intelligent Systems Conference 2019, which attracted a total of 546 submissions from pioneering researchers, scientists, industrial engineers, and students from all around the world. These submissions underwent a double-blind peer-review process, after which 190 were selected for inclusion in these proceedings. As intelligent systems continue to replace and sometimes outperform human intelligence in decision-making processes, they have made it possible to tackle a host of problems more effectively. This branching out of computational intelligence in several directions and use of intelligent systems in everyday applications have created the need for an international conference as a venue for reporting on the latest innovations and trends. This book collects both theory and application based chapters on virtually all aspects of artificial intelligence; presenting state-of-the-art intelligent methods and techniques for solving real-world problems, along with a vision for future research, it represents a unique and valuable asset.

The six-volume set LNCS 8579-8584 constitutes the refereed proceedings of the 14th International Conference on Computational Science and Its Applications, ICCSA 2014, held in Guimarães, Portugal, in June/July 2014. The 347 revised papers presented in 30 workshops and a special track were carefully reviewed and selected from 1167. The 289 papers presented in the workshops cover various areas in computational science ranging from computational science technologies to specific areas of computational science such as computational geometry and security.

This book constitutes the refereed proceedings of the Second International Symposium on Dependable Software Engineering: Theories, Tools, and Applications, SETTA 2016, held in Beijing, China, in November 2016. The 17 full papers presented together with 3 short papers were carefully reviewed and selected from 58 submissions. The aim of the symposium is to bring together international researchers and practitioners in the field of software technology. Its focus is on formal methods and advanced software technologies, especially for engineering complex, large-scale artifacts like cyber-physical systems, networks of things,

enterprise systems, or cloud-based services.

13th International Conference, ICIAR 2016, in Memory of Mohamed Kamel, Póvoa de Varzim, Portugal, July 13-15, 2016, Proceedings

SOFSEM 2018: Theory and Practice of Computer Science

Proceedings of the 2019 Intelligent Systems Conference (IntelliSys) Volume 1

First International Conference, SCITA 2017, Jeddah, Saudi Arabia, November 27–29, 2017, Proceedings

Third Pacific Rim Symposium, PSIVT 2009, Tokyo, Japan, January 13-16, 2009, Proceedings

Image Analysis

Counterinsurgency

Dependable Software Engineering: Theories, Tools, and Applications

This book constitutes the refereed proceedings of the 6th International Workshop on Formal Techniques for Safety-Critical Systems, FTSCS 2018, held in Gold Coast, Australia in November 2018. The 10 revised full papers presented together with an abstract of an invited talk were carefully reviewed and selected from 22 submissions. The papers are organized in topical sections on analysis and verification of Safety-Critical Systems; analysis of timed systems; semantics and analysis methods, and model transformation.

This book constitutes the proceedings of the 19th International Conference on Computer Information Systems and Industrial Management Applications, CISIM 2020, held in Bialystok, Poland, in October 2020. Due to the COVID-19 pandemic the conference has been postponed to October 2020. The 40 full papers presented together with 5 abstracts of keynotes were carefully reviewed and selected from 62 submissions. The main topics covered by the chapters in this book are biometrics, security systems, multimedia, classification and clustering, industrial management. Besides these, the reader will find interesting papers on computer information systems as applied to wireless networks, computer graphics, and intelligent systems. The papers are organized in the following topical sections: biometrics and pattern recognition applications; computer information systems and security; industrial management and other applications; machine learning and high performance computing; modelling and optimization.

This book constitutes the refereed proceedings of the 26th International Conference on Information and Software Technologies, ICIST 2020, held in Kaunas, Lithuania, in October 2020. The 23 full papers and 7 short papers presented were carefully reviewed and selected from 78 submissions. The papers are organized in topical sections on ?business intelligence for information and software system; software engineering; information technology applications.

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, D- mark 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 keynote 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 biomedical 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.

SpaCCS 2016 International Workshops, TrustData, TSP, NOPE, DependSys, BigDataSPT, and WCSSC, Zhangjiajie, China, November 16-18, 2016, Proceedings

44th International Conference on Current Trends in Theory and Practice of Computer Science, Krems, Austria, January 29 - February 2, 2018, Proceedings

Advances in Neural Networks

10th International Symposium, ISVC 2014, Las Vegas, NV, USA, December 8-10, 2014, Proceedings, Part II

15th International Conference on Applications of Natural Language to Information Systems, NLDB 2010, Cardiff, UK, June 23-25, 2010, Proceedings

Proceedings of the 2019 Computing Conference, Volume 2

Security, Privacy and Anonymity in Computation, Communication and Storage

ICISA 2017

This book constitutes the refereed proceedings of the 44th International Conference on Current Trends in Theory and Practice of Computer Science, SOFSEM 2018, held in Krems, Austria, in January/February 2018. The 48 papers presented in this volume were carefully reviewed and selected from 97 submissions. They were organized in topical sections named: foundations of computer science; software engineering: advances methods, applications, and tools; data, information and knowledge engineering; network science and parameterized complexity; model-based software engineering; computational models and complexity; software quality assurance and transformation; graph structure and computation; business processes, protocols, and mobile networks; mobile robots and server systems; automata, complexity, completeness; recognition and generation; optimization, probabilistic analysis, and sorting; filters, configurations, and picture encoding;

machine learning; text searching algorithms; and data model engineering.

Hayashi's *Econometrics* promises to be the next great synthesis of modern econometrics. It introduces first year Ph.D. students to standard graduate econometrics material from a modern perspective. It covers all the standard material necessary for understanding the principal techniques of econometrics from ordinary least squares through cointegration. The book is also distinctive in developing both time-series and cross-section analysis fully, giving the reader a unified framework for understanding and integrating results. Econometrics has many useful features and covers all the important topics in econometrics in a succinct manner. All the estimation techniques that could possibly be taught in a first-year graduate course, except maximum likelihood, are treated as special cases of GMM (generalized methods of moments). Maximum likelihood estimators for a variety of models (such as probit and tobit) are collected in a separate chapter. This arrangement enables students to learn various estimation techniques in an efficient manner. Eight of the ten chapters include a serious empirical application drawn from labor economics, industrial organization, domestic and international finance, and macroeconomics. These empirical exercises at the end of each chapter provide students a hands-on experience applying the techniques covered in the chapter. The exposition is rigorous yet accessible to students who have a working knowledge of very basic linear algebra and probability theory. All the results are stated as propositions, so that students can see the points of the discussion and also the conditions under which those results hold. Most propositions are proved in the text. For those who intend to write a thesis on applied topics, the empirical applications of the book are a good way to learn how to conduct empirical research. For the theoretically inclined, the no-compromise treatment of the basic techniques is a good preparation for more advanced theory courses.

The proceeding is a collection of research papers presented at the 11th International Conference on Robotics, Vision, Signal Processing & Power Applications (RoViSP 2021). The theme of RoViSP 2021 "Enhancing Research and Innovation through the Fourth Industrial Revolution (IR 4.0)" served as a platform for researchers, scientists, engineers, academicians as well as industrial professionals from all around the globe to present and exchange their research findings and development activities through oral presentations. The book covers various topics of interest, including: Robotics, Control, Mechatronics and Automation Telecommunication Systems and Applications Electronic Design and Applications Vision, Image and Signal Processing Electrical Power, Energy and Industrial Applications Computer and Information Technology Biomedical Engineering and Applications Intelligent Systems Internet-of-things Mechatronics Mobile Technology

David Kilcullen is one of the world's most influential experts on counterinsurgency and modern warfare, a ground-breaking theorist whose ideas "are revolutionizing military thinking throughout the west" (Washington Post). Indeed, his vision of modern warfare powerfully influenced the United States' decision to rethink its military strategy in Iraq and implement "the Surge," now recognized as a dramatic success. In Counterinsurgency, Kilcullen brings together his most salient writings on this vitally important topic. Here is a picture of modern warfare by someone who has had his boots on the ground in some of today's worst trouble spots-including Iraq and Afghanistan-and who has been studying counterinsurgency since 1985. Filled with down-to-earth, common-sense insights, this book is the definitive account of counterinsurgency, indispensable for all those interested in making sense of our world in an age of terror.

16th International Conference on Asia-Pacific Digital Libraries, ICADL 2014, Chiang Mai, Thailand, November 5-7, 2014, Proceedings

Verification and Evaluation of Computer and Communication Systems

6th International Workshop, FTSCS 2018, Gold Coast, Australia, November 16, 2018, Revised Selected Papers
Telematics and Computing

2021 International Conference on Digital Futures and Transformative Technologies (ICoDT2)
Smart Societies, Infrastructure, Technologies and Applications

10th International Conference, CICM 2017, Edinburgh, UK, July 17-21, 2017, Proceedings
Information Science and Applications 2017

This book contains selected papers from the 8th International Conference on Information Science and Applications (ICISA 2017) and provides a snapshot of the latest issues encountered in technical convergence and convergences of security technology. It explores how information science is core to most current research, industrial and commercial activities and consists of contributions covering topics including Ubiquitous Computing, Networks and Information Systems, Multimedia and Visualization, Middleware and Operating Systems, Security and Privacy, Data Mining and Artificial Intelligence, Software Engineering, and Web Technology. The proceedings introduce the most recent information technology and ideas, applications and problems related to technology convergence, illustrated through case studies, and reviews converging existing security techniques. Through this volume, readers will gain an understanding of the current state-of-the-art information strategies and technologies of convergence security. The intended readerships are researchers in academia, industry and other research institutes focusing on information science and technology.

This book constitutes the thoroughly refereed post-conference proceedings of the 17th Brazilian Symposium on Formal

Methods, SBMF 2014, held in Macei ó , Brazil, in September/October 2014. The 9 revised full papers presented together with 2 invited talks were carefully reviewed and selected from 34 submissions. SBMF is an event devoted to the dissemination of the development and use of formal methods for the construction of high quality computational systems, aiming to promote opportunities for researchers with interests in formal methods to discuss the recent advances in this area.

This volume constitutes the refereed proceedings of six workshops held at the 9th International Conference on Security, Privacy and Anonymity in Computation, Communication and Storage, SpaCCS 2016, held in Zhangjiajie, China, in November 2016: the 7th International Workshop on Trust, Security and Privacy for Big Data, TrustData 2016; the 6th International Symposium on Trust, Security and Privacy for Emerging Applications, TSP 2016; the 4th International Workshop on Network Optimization and Performance Evaluation, NOPE 2016; the Second International Symposium on Dependability in Sensor, Cloud, and Big Data Systems and Applications, DependSys 2016; the Annual Big Data Security, Privacy and Trust Workshop, BigDataSPT 2016; and the First International Workshop on Cloud Storage Service and Computing, WCSSC 2016. The 37 full papers presented were carefully reviewed and selected from 95 submissions. The papers deal with research findings, ideas and emerging trends in information security research and cover a broad range of topics in security, privacy and anonymity in computation, communication and storage.

Proceedings of SPIE present the original research papers presented at SPIE conferences and other high-quality conferences in the broad-ranging fields of optics and photonics. These books provide prompt access to the latest innovations in research and technology in their respective fields. Proceedings of SPIE are among the most cited references in patent literature.

Photonic Applications in Biosensing and Imaging

11th International Conference, VECoS 2017, Montreal, QC, Canada, August 24–25, 2017, Proceedings

Computational Science and Its Applications -- ICCSA 2012

Advances in Computer Communication and Computational Sciences

Enhancing Research and Innovation through the Fourth Industrial Revolution

Gas, Water and Solid Waste Treatment Technology

14th International Conference, Guimarães, Portugal, June 30 - July 3, 2014, Proceedings, Part V

Handbook of Intelligent Computing and Optimization for Sustainable Development

The purpose of this activity is to provide a forum for researchers, developers and practitioners from both academia and industry to meet and share cutting edge advancements in the field of Digital Futures

and Transformative Technologies

This book constitutes the refereed proceedings of the 10th International Conference on Intelligent Computer Mathematics, CICM 2017, held in Edinburgh, Scotland, in July 2017. The 22 full papers and 3 abstracts of invited papers presented were carefully reviewed and selected from a total of 40 submissions. The papers are organized in three tracks: the Calculemus track examining the integration of symbolic computation and mechanized reasoning; the Digital Mathematics Libraries track dealing with math-aware technologies, standards, algorithms, and processes; the Mathematical Knowledge Management track being concerned with all aspects of managing mathematical knowledge, in informal, semi-formal, and formal settings. An additional track Systems and Projects contains descriptions of systems and relevant projects, both of which are key to a research topic where theory and practice interact on explicitly represented knowledge.

?This book constitutes the proceedings of the 11th International Conference International Conference on Verification and Evaluation of Computer and Communication Systems (VECoS 2017), held at Concordia University, Montreal, Canada, in August 2017. The 13 full papers, together with 3 abstracts in this volume were carefully reviewed and selected from 35 submissions. The aim of the VECoS conference is to bring together researchers and practitioners in the areas of verification, control, performance and dependability evaluation in order to discuss state-of-the-art and challenges in modern computer and communication systems in which functional and extra-functional properties are strongly interrelated. Thus, the main motivation for VECoS is to encourage the cross-fertilization between various formal verification and evaluation approaches, methods and techniques, and especially those developed for concurrent and dis-tributed hardware/software systems.

This book constitutes the thoroughly refereed proceedings of the 13th International Conference on Image Analysis and Recognition, ICIAR 2016, held in Póvoa de Varzim, Portugal, in July 2016. The 79 revised full papers and 10 short papers presented were carefully reviewed and selected from 167 submissions. The papers are organized in the following topical sections: Advances in Data Analytics and Pattern Recognition with Applications, Image Enhancement and Restoration, Image Quality Assessment, Image Segmentation, Pattern Analysis and Recognition, Feature Extraction, Detection and Recognition, Matching, Motion and Tracking, 3D Computer Vision, RGB-D Camera Applications, Visual Perception in Robotics, Biometrics, Biomedical Imaging, Brain Imaging, Cardiovascular Image Analysis, Image Analysis in Ophthalmology, Document Analysis, Applications, and Obituaries. The chapter 'Morphological Separation of Clustered Nuclei in Histological Images' is published open access under a CC BY 4.0 license at link.springer.com.

*Computational Science and Its Applications - ICCSA 2014
Intelligent Computing*

*Cyber Physical Systems. Design, Modeling, and Evaluation
International Conference, CICM 2015, Washington, DC, USA, July 13–17, 2015, Proceedings.*

For Practitioners in the Oil, Gas and Petrochemical Industry

Formal Methods: Foundations and Applications

26th International Conference, ICIST 2020, Kaunas, Lithuania, October 15–17, 2020, Proceedings

Computer Information Systems and Industrial Management

The two-volume set LNCS 8218 and 8219 constitutes the refereed proceedings of the 12th International Semantic Web Conference, ISWC 2013, held in Sydney, Australia, in October 2013. The International Semantic Web Conference is the premier forum for Semantic Web research, where cutting edge scientific results and technological innovations are presented, where problems and solutions are discussed, and where the future of this vision is being developed. It brings together specialists in fields such as artificial intelligence, databases, social networks, distributed computing, Web engineering, information systems, human-computer interaction, natural language processing, and the social sciences. Part 1 (LNCS 8218) contains a total of 45 papers which were presented in the research track. They were carefully reviewed and selected from 210 submissions. Part 2 (LNCS 8219) contains 16 papers from the in-use track which were accepted from 90 submissions. In addition, it presents 10 contributions to the evaluations and experiments track and 5 papers of the doctoral consortium.

This book constitutes the thoroughly refereed conference proceedings of the 18th International Workshop on Formal Methods for Industrial Critical Systems, FMICS 2013, held in Madrid, Spain, in September 2013. The 13 papers presented were carefully selected from 25 submissions and cover topics such as design, specification, code generation and testing based on formal methods, methods, techniques and tools to support automated analysis, certification, debugging, learning, optimization and transformation of complex, distributed, dependable, real-time systems and embedded systems, verification and validation methods, tools for the development of formal design descriptions, case studies and experience reports on industrial applications of formal methods, impact of the adoption of formal methods on the development process and associated costs, application of formal methods in standardization and industrial forums.

th The 15 International Conference on Applications of Natural Language to Information Systems (NLDB 2010) took place during June 23–25 in Cardiff (UK). Since the first edition in 1995, the NLDB conference has been aiming at bringing together researchers, people working in industry and potential users interested in various applications of natural language in the database and information system area. However, in order to reflect the growing importance of accessing information from a diverse collection of sources (Web, Databases, Sensors, Cloud) in an equally wide

range of contexts (including mobile and tethered), the theme of the 15th International Conference on Applications of Natural Language to Information Systems 2010 was "Communicating with Anything, Anywhere in Natural Language." Natural languages and databases are core components in the development of information systems. Natural language processing (NLP) techniques may substantially enhance most phases of the information system lifecycle, starting with requirement analysis, specification and validation, and going up to conflict resolution, result processing and presentation. Furthermore, natural language-based query languages and user interfaces facilitate the access to information for all and allow for new paradigms in the usage of computerized services. Hot topics such as information retrieval (IR), software engineering applications, hidden Markov models, natural language interfaces and semantic networks and graphs imply a complete fusion of databases, IR and NLP techniques.

This book constitutes the refereed proceedings of the Third Pacific Rim Symposium on Image and Video Technology, PSIVT 2008, held in Tokyo, Japan, in January 2009. The 39 revised full papers and 57 posters were carefully reviewed and selected from 247 submissions. The symposium features 8 major themes including all aspects of image and video technology: image sensors and multimedia hardware; graphics and visualization; image and video analysis; recognition and retrieval; multi-view imaging and processing; computer vision applications; video communications and networking; and multimedia processing. The papers are organized in topical sections on faces and pedestrians; panoramic images; local image analysis; organization and grouping; multiview geometry; detection and tracking; computational photography and forgeries; coding and steganography; recognition and search; and reconstruction and visualization.

Second International Symposium, SETTA 2016, Beijing, China, November 9-11, 2016, Proceedings

Econometrics

12-14 September, 2005, Toronto, Canada

Intelligent Computer Mathematics

Covid-19 Challenges for Pakistan

The Emergence of Digital Libraries -- Research and Practices

Handbook of Electrical Engineering

12th International Conference, Salvador de Bahia, Brazil, June 18-21, 2012, Proceedings, Part III

The two volume set LNCS 8887 and 8888 constitutes the refereed proceedings of the 10th International Symposium on Visual Computing, ISVC 2014, held in Las Vegas, NV, USA. The 74 revised full papers and 55 poster papers presented together with 39 special track papers were carefully reviewed and selected from more than 280 submissions. The papers

are organized in topical sections: Part I (LNCS 8887) comprises computational bioimaging, computer graphics; motion, tracking, feature extraction and matching, segmentation, visualization, mapping, modeling and surface reconstruction, unmanned autonomous systems, medical imaging, tracking for human activity monitoring, intelligent transportation systems, visual perception and robotic systems. Part II (LNCS 8888) comprises topics such as computational bioimaging, recognition, computer vision, applications, face processing and recognition, virtual reality, and the poster sessions. This book constitutes the proceedings of the 7th International Workshop on Design, Modeling, and Evaluation of Cyber Physical Systems, CyPhy2017, held in conjunction with ESWeek 2017, in Seoul, South Korea, in October 2017. The 10 papers presented together with 1 extended and 1 invited abstracts in this volume were carefully reviewed and selected from 16 submissions. The conference presents a wide range of domains including robotics; smart homes, vehicles, and buildings; medical implants; and future-generation sensor networks.

This book constitutes the refereed proceedings of the 16th International Conference on Asia-Pacific Digital Libraries, ICADL 2014, held in Chiang Mai, Thailand, in November 2014. The 20 full papers, 19 short papers and 9 poster papers presented were carefully reviewed and selected from 141 submissions. The papers are organized in topical sections on digital preservation and archiving; digital repositories and tools; scholarly documents repositories; metadata and ontologies; linked data and knowledge sharing; digital books and e-books; digital libraries usage and applications; data management and classification; information retrieval and search methods; user skills and experiences.

A practical treatment of power system design within the oil, gas, petrochemical and offshore industries. These have significantly different characteristics to large-scale power generation and long distance public utility industries. Developed from a series of lectures on electrical power systems given to oil company staff and university students, Sheldrake's work provides a careful balance between sufficient mathematical theory and comprehensive practical application knowledge. Features of the text include: Comprehensive handbook detailing the application of electrical engineering to the oil, gas and petrochemical industries Practical guidance to the electrical systems equipment used on off-shore production platforms, drilling rigs, pipelines, refineries and chemical plants Summaries of the necessary theories behind the design together with practical guidance on selecting the correct electrical equipment and systems required Presents numerous 'rule of thumb' examples enabling quick and accurate estimates to be made Provides worked examples to demonstrate the topic with practical parameters and data Each chapter contains initial revision and reference sections prior to concentrating on the practical aspects of power engineering including the use of computer modelling Offers numerous references to other texts, published papers and international standards for guidance and as sources of further reading material Presents over 35 years of experience in one self-contained reference Comprehensive appendices include lists of abbreviations in common use, relevant international standards and conversion factors for units of measure An essential reference for electrical engineering designers, operations and maintenance engineers and

technicians.

Formal Techniques for Safety-Critical Systems

18th International Workshop, FMICS 2013, Madrid, Spain, September 23-24, 2013, Proceedings

9th International Congress, WITCOM 2020, Puerto Vallarta, Mexico, November 2–6, 2020, Proceedings

Information Science and Applications (ICISA) 2016

21st Brazilian Symposium, SBMF 2018, Salvador, Brazil, November 26–30, 2018, Proceedings

Natural Language Processing and Information Systems

25th International Conference, ICIST 2019, Vilnius, Lithuania, October 10–12, 2019, Proceedings

Computational Intelligence for ICT

This carefully edited book is putting emphasis on computational and artificial intelligent methods for learning and their relative applications in robotics, embedded systems, and ICT interfaces for psychological and neurological diseases. The book is a follow-up of the scientific workshop on Neural Networks (WIRN 2015) held in Vietri sul Mare, Italy, from the 20th to the 22nd of May 2015. The workshop, at its 27th edition became a traditional scientific event that brought together scientists from many countries, and several scientific disciplines. Each chapter is an extended version of the original contribution presented at the workshop, and together with the reviewers' peer revisions it also benefits from the live discussion during the presentation. The content of book is organized in the following sections. 1. Introduction, 2. Machine Learning, 3. Artificial Neural Networks: Algorithms and models, 4. Intelligent Cyberphysical and Embedded System, 5. Computational Intelligence Methods for Biomedical ICT in Neurological Diseases, 6. Neural Networks-Based Approaches to Industrial Processes, 7. Reconfigurable Modular Adaptive Smart Robotic Systems for Optoelectronics Industry: The White'R Instantiation This book is unique in proposing a holistic and multidisciplinary approach to implement autonomous, and complex Human Computer Interfaces.

This book presents the proceedings of the Computing Conference 2019, providing a comprehensive collection of chapters focusing on core areas of computing and their real-world applications. Computing is an extremely broad discipline, encompassing a range of specialized fields, each focusing on particular areas of technology and types of application, and the conference offered pioneering researchers, scientists, industrial engineers, and students from around the globe a platform to share new ideas and development experiences. Providing state-of-the-art intelligent methods and techniques for solving real- world problems, the book inspires further research and technological advances in this important area. Intelligent Computer Mathematics International Conference, CICM 2015, Washington, DC, USA, July 13-17, 2015, Proceedings. Springer

This book constitutes the refereed post-conference proceedings of the First International Conference on Smart Cities, Infrastructures, Technologies and Applications, SCITA 2017, held in Jeddah, Saudi Arabia, in November 2017. The 35 revised full papers were carefully reviewed and selected from 62 submissions. The papers are grouped in topical sections: infrastructure track, e-governance and transportation track, healthcare track, applications track.

Formal Methods for Industrial Critical Systems

Information and Software Technologies

17th Brazilian Symposium, SBMF 2014, Maceió, AL, Brazil, September 29--October 1, 2014. Proceedings

Advances in Visual Computing

Image Analysis and Recognition

Proceedings of IC4S 2018

Advances in Image and Video Technology

HANDBOOK OF INTELLIGENT COMPUTING AND OPTIMIZATION FOR SUSTAINABLE DEVELOPMENT This book provides a comprehensive overview of the latest breakthroughs and recent progress in sustainable intelligent computing technologies, applications, and optimization techniques across various industries. Optimization has received enormous attention along with the rapidly increasing use of communication technology and the development of user-friendly software and artificial intelligence. In almost all human activities, there is a desire to deliver the highest possible results with the least amount of resources. Moreover, optimization is a very well-known area with a vast number of applications, from route finding problems to traffic treatment, construction, finance, accounting, engineering, and maintenance schedules in plants. As far as optimization in the real world problems is concerned, understanding the nature of the problem and grouping it in a proper class may help to identify and employ proper techniques which can solve the problem efficiently. Many intelligent optimization techniques can find global solutions without the use of objective function and are less prone to local conditions. The 41 chapters comprising this book of Intelligent Computing and Optimization for Sustainable Development by subject specialists, represent diverse disciplines such as mathematics and computer science, electrical and electronics engineering, neuroscience and cognitive sciences, natural and social sciences, and provide the reader with an integrated understanding of the importance that intelligent computing and optimization play in the sustainable development of current societies. It discusses the emerging research exploring the theoretical and practical aspects of successfully implementing new and innovative intelligent techniques in a variety of sectors, including IoT, manufacturing, optimization, and healthcare. Audience It is a pivotal reference source for IT specialists, industry professionals, managers, executives, researchers, scientists, and engineers seeking current research in emerging perspectives in the field of artificial intelligence in the areas of Internet of Things, renewable energy, optimization, and smart cities.

This book constitutes the refereed proceedings of the International Conference on Intelligent Computer Mathematics (ICM 2015), held in Washington, DC, USA, in July 2015. The 16 full papers and 9 short papers presented together with two keynote speeches plus one abstract were carefully reviewed and selected from a total of 43 submissions. The papers are organized in five tracks following the tracks of the conference: Invited Talks; Calculamus; Digital Mathematics Libraries; Mathematical Knowledge Management; Projects and Surveys; Systems and Data.

This book constitutes the refereed proceedings of the 21st Brazilian Symposium on Formal Methods, SBMF 2018, which took place in Salvador, Brazil, in November 2018. The 16 regular papers presented in this book were carefully reviewed and selected from 30 submissions. The papers are organized in topical sections such as: techniques and methodologies; specification and modeling languages; theoretical foundations; verification and validation; experience reports regarding teaching formal methods and applications. Chapter "TeSSLa: Temporal Stream-Based Specification Language" is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.

This book contains selected papers from the 7th International Conference on Information Science and Applications (ICISA) and provides a snapshot of the latest issues encountered in technical convergence and convergences of security technologies. It explores how information science is core to most current research, industrial and commercial activities and consists of contributions covering topics including Ubiquitous Computing, Networks and Information Systems, Multimedia and Visualization, Middleware and Operating Systems, Security and Privacy, Data Mining and Artificial Intelligence, Software Engineering, and Web Technology. The contributions describe the most recent developments in information technology, new ideas, applications and problems related to technology convergence, illustrated through case studies, and reviews of existing security techniques. Through this volume, readers will gain an understanding of the current state-of-the-art in security strategies and technologies of convergence security. The intended readers are researchers in academia, industry and research institutes focusing on information science and technology.