Mihai S Work In Computational Geometry

This book covers new developments and advances in the field of Computational Strategies for next-generation computing. The contributing authors share diverse perspectives on and extensive discussions of issues concerning the theory, applications, and future prospects. Addressing computing methodologies, hardware information systems and networks, this interdisciplinary book will appeal to all scholars with an interest in computing methodologies, hardware information systems and networks.

The need for economically feasible and multifunctional materials becomes more acute as the natural physical and chemical resources reveal either their limits or reveal the difficulties and increasing costs in storage, transport, and conversion. This reference presents the work from contributors from various fields, of various ages and from different countries, creating a valuable collection of research that will advance the fundamental and innovative techniques of nanosystems and their interactions. The authors cover self-assembly, self-regenerating, storage, and directional properties of intelligent materials. It helps readers respond to the challenges in this field.

With a specific focus on the mathematical life in small undergraduate colleges, this book presents a variety of elementary number theory insights involving sequences largely built from prime numbers and contingent number-

theoretic functions. Chapters include new mathematical ideas and open problems, some of which are proved in the text. Vector valued MGPF sequences, extensions of Conway's Subprime Fibonacci sequences, and linear complexity of bit streams derived from GPF sequences are among the topics covered in this book. This book is perfect for the pure-mathematics-minded educator in a small undergraduate college as well as graduate students and advanced undergraduate students looking for a significant high-impact learning experience in mathematics.

Volume 2 of the 5-volume Quantum Nanochemistry presents in a balanced manner the fundamental and advanced concepts, principles, and models as well as their first and novel combinations and applications in quantum (physical) and chemical theory of atomic structure. It exposes the atom's perspective of quantum structures, spanning its diverse analytical predictions by historical and in-depth quantum analysis of the atomic periodicities of the atomic radii, ionization potential, electron affinity, electronegativity, and chemical hardness, along with the recently consecrated electrophilicity and chemical action—as the main global reactivity indices are assessed when next judging the chemical reactivity through their associate principles.

The interdisciplinary topic of anticipation, attracting attention fromnbsp;computer scientists, psychologists, philosophers, neuroscientists, and biologists is a rather new and often misunderstood matter of research. This book attempts to establish anticipation as a research topic and encourage further research and development

work. First, the book presents philosophical thoughts and concepts to stimulate the reader's concern about the topic. Fundamental cognitive psychology experiments then confirm the existence of anticipatory behavior in animals and humans and outline a first framework of anticipatory learning and behavior. Next, several distinctions and frameworks of anticipatory processes are discussed, including first implementations of these concepts. Finally, several anticipatory systems and studies on anticipatory behavior are presented.

QSAR and SPECTRAL-SAR in Computational Ecotoxicology presents a collection of studies based on the epistemological bulk data-information-knowledge of the chemicals used in green chemistry. It assesses a specific model of pattern characterization of concerned active substances at the bio-, eco-, and pharmacologic levels through unitary formulation o

Volume 4 of the 5-volume Quantum Nanochemistry covers quantum (physical) chemical theory of solids and orderability and addresses the electronic order problems in the solid state viewed as a huge molecule in special quantum states, including also the bondonic treatment of the graphene nano-ribbons, along basic crystallographic principles, from geometrical-, to chemical- to physical- (x-ray) crystallography with featured examples, and energetic correlating symmetry discussion on orderability in nanochemical compounds.

This book constitutes the refereed proceedings of the 12th Pacific-Asia Conference on Knowledge Discovery and Data Mining, PAKDD 2008, held in Osaka, Japan, in May 2008. The 37 revised long papers, 40 revised full

papers, and 36 revised short papers presented together with 1 keynote talk and 4 invited lectures were carefully reviewed and selected from 312 submissions. The papers present new ideas, original research results, and practical development experiences from all KDD-related areas including data mining, data warehousing, machine learning, databases, statistics, knowledge acquisition, automatic scientific discovery, data visualization, causal induction, and knowledge-based systems.

We present in this volume the collection of finally accepted papers of the eighth edition of the “IWANN” conference (“International Work-Conference on Artificial Neural Networks”). This biennial meeting focuses on the foundations, theory, models and applications of systems inspired by nature (neural networks, fuzzy logic and evolutionary systems). Since the first edition of IWANN in Granada (LNCS 540, 1991), the Artificial Neural Network (ANN) community, and the domain itself, have matured and evolved. Under the ANN banner we find a very heterogeneous scenario with a main interest and objective: to better understand nature and beings for the correct elaboration of theories, models and new algorithms. For scientists, engineers and professionals working in the area, this is a very good way to get solid and competitive applications. We are facing a real revolution with the emergence of embedded intelligence in many artificial systems (systems covering diverse fields: industry, domotics, leisure, healthcare, ...). So we are convinced that an enormous amount of work must be, and should be, still done. Many pieces of the puzzle must be built and placed into their proper positions, offering us new and solid theories and models (necessary tools) for the application and praxis of these current paradigms. The above-mentioned concepts

were the main reason for the subtitle of the IWANN 2005 edition: “Computational Intelligence and Bioinspired Systems.” The call for papers was launched several months ago, addressing the following topics: 1. Mathematical and theoretical methods in computational intelligence.

These two volumes constitute the Proceedings of the 7th International Workshop on Soft Computing Applications (SOFA 2016), held on 24–26 August 2016 in Arad, Romania. This edition was organized by Aurel Vlaicu University of Arad, Romania, University of Belgrade, Serbia, in conjunction with the Institute of Computer Science, Iasi Branch of the Romanian Academy, IEEE Romanian Section, Romanian Society of Control Engineering and Technical Informatics (SRAIT) - Arad Section, General Association of Engineers in Romania - Arad Section, and BTM Resources Arad. The soft computing concept was introduced by Lotfi Zadeh in 1991 and serves to highli ght the emergence of computing methodologies in which the accent is on exploiting the tolerance for imprecision and uncertainty to achieve tractability, robustness and lower costs. Soft computing facilitates the combined use of fuzzy logic, neurocomputing, evolutionary computing and probabilistic computing, leading to the concept of hybrid intelligent systems. The rapid emergence of new tools and applications calls for a synergy of scientific and technological disciplines in order to reveal the great potential of soft computing in all domains. The conference papers included in these proceedings, published post-conference, were grouped into the following areas of research: • Methods and Applications in Electrical Engineering • Knowledge-Based Technologies for Web Applications, Cloud Computing, Security Algorithms and Computer Networks • Biomedical Applications • Image, Text and Signal Processing • Machine Learning and Applications • &nb sp; Business Process Management • Fuzzy

Applications, Theory and Fuzzy Control • Computational Intelligence in Education • Soft Computing & Fuzzy Logic i n Biometrics (SCFLB) • Soft Computing Algorithms Applied in Economy, Industry and Communication Technology • Modelling and Applications in Textiles The book helps to disseminate advances in selected active research directions in the field of soft computing, along with current issues and applications of related topics. As such, it provides valuable information for professors, researchers and graduate students in the area of soft computing techniques and applications.

NB: LNAI 890 and LNAI 1037 are the first and second books respectively in this series of three books on Intelligent Agents.

Volume 1 of the 5-volume Quantum Nanochemistry set presents an overall perspective of nuclear, atomic, molecular, and solids structures, and the observability and quantum properties as based on the quantum principles in their various levels of applications, from Planck, Bohr, Einstein, Schrödinger, Hartree-Fock, up to Feynman Path Integral approaches. The volume presents in a balanced manner the fundamental and advanced concepts, principles, and models as well as their first and novel combinations and applications in modeling complex natural or designed phenomena.

This two-volume set (CCIS 1393 and CCIS 1394) constitutes selected and revised papers of the 4th International Conference on Advanced Informatics for Computing Research, ICAICR 2020, held in Gurugram, India, in December 2020. The 34 revised full papers and 51 short papers presented were carefully reviewed and selected from 306 submissions. The papers are organized in topical sections on computing methodologies; hardware; networks; security and privacy.

Peer-to-peer (P2P) technology, or peer computing, is a paradigm that is viewed as a potential technology for redesigning distributed architectures and, consequently,

distributed processing. Yet the scale and dynamism that characterize P2P systems demand that we reexamine traditional distributed technologies. A paradigm shift that includes self-reorganization, adaptation and resilience is called for. On the other hand, the increased computational power of such networks opens up completely new applications, such as in digital content sharing, scientific computation, gaming, or collaborative work environments. In this book, Vu, Lupu and Ooi present the technical challenges offered by P2P systems, and the means that have been proposed to address them. They provide a thorough and comprehensive review of recent advances on routing and discovery methods; load balancing and replication techniques; security, accountability and anonymity, as well as trust and reputation schemes; programming models and P2P systems and projects. Besides surveying existing methods and systems, they also compare and evaluate some of the more promising schemes. The need for such a book is evident. It provides a single source for practitioners, researchers and students on the state of the art. For practitioners, this book explains best practice, guiding selection of appropriate techniques for each application. For researchers, this book provides a foundation for the development of new and more effective methods. For students, it is an overview of the wide range of advanced techniques for realizing effective P2P systems, and it can easily be used as a text for an advanced course on Peer-to-Peer Computing and Technologies, or as a companion text for courses on various subjects, such as distributed systems, and grid and cluster computing.

This title reports the state-of-the-art advancements in modeling and characterization of fundamental and the recently designed carbon based nanocomposites (graphenes, fullerenes, polymers, crystals and allotropic forms). Written by

leading experts in the field, the book explores the quantification, indexing, and interpretation of physical and chemical exotic properties related with space-time structure-evolution, phase transitions, chemical reactivity, and topology. Exotic Properties of Carbon Nanomatter is aimed at researchers in academia and industry.

Volume 3 of the 5-volume Quantum Nanochemistry presents the chemical reactivity throughout the molecular structure in general and chemical bonding in particular by introducing the bondons as the quantum bosonic particles of the chemical field, localization, from Huckel to Density Functional expositions, especially in relation to how chemical princi

The EURO-C conference series (Split 1984, Zell am See 1990, Innsbruck 1994, Badgastein 1998, St. Johann im Pongau 2003, Mayrhofen 2006, Schladming 2010, St. Anton am Arlberg 2014, and Bad Hofgastein 2018) brings together researchers and practising engineers concerned with theoretical, algorithmic and validation aspects associated with computational simulations of concrete and concrete structures. Computational Modelling of Concrete Structures reviews and discusses research advancements and the applicability and robustness of methods and models for reliable analysis of complex concrete, reinforced concrete and pre-stressed concrete structures in engineering practice. The contributions cover both computational mechanics and computational modelling aspects of the analysis and design of concrete and concrete structures: Multi-scale cement and concrete research: experiments and modelling Aging concrete: from very early ages to decades-long durability Advances in material modelling of plain concrete Analysis of reinforced concrete structures Steel-concrete interaction, fibre-reinforced concrete, and masonry Dynamic behaviour: from seismic retrofit to impact simulation Computational Modelling of Concrete Structures is of special interest to academics and

researchers in computational concrete mechanics, as well as industry experts in complex nonlinear simulations of concrete structures.

The International Conference on Computational Science (ICCS 2004) held in Krak ? ow, Poland, June 6–9, 2004, was a follow-up to the highly successful ICCS 2003 held at two locations, in Melbourne, Australia and St. Petersburg, Russia; ICCS 2002 in Amsterdam, The Netherlands; and ICCS 2001 in San Francisco, USA. As computational science is still evolving in its quest for subjects of inves- gation and e?cient methods, ICCS 2004 was devised as a forum for scientists from mathematics and computer science, as the basic computing disciplines and application areas, interested in advanced computational methods for physics, chemistry, life sciences, engineering, arts and humanities, as well as computer system vendors and software developers. The main objective of this conference was to discuss problems and solutions in all areas, to identify new issues, to shape future directions of research, and to help users apply various advanced computational techniques. The event harvested recent developments in com- tationalgridsandnextgenerationc omputingsystems,tools,advancednumerical methods, data-driven systems, and novel application ?elds, such as complex - stems, ?nance, econo-physics and population evolution. (1998) 2. Antoniou, I., Calude, C.S., Dinneen, M.J. (eds.): Unconventional Models of Computation,UMC2K:Proceedings oftheSecondInternationalConference.

This book constitutes the refereed proceedings of the 9th International Conference on Computational Linguistics and Intelligent Text Processing, CICLing 2008, held in Haifa, Israel, in February 2008. The 52 revised full papers presented together with 4 invited papers were carefully reviewed and selected from numerous submissions. The papers cover all current issues in computational linguistics research and

present intelligent text processing applications. The papers are organized in topical sections on language resources, morphology and syntax, semantics and discourse, word sense disambiguation and named entity recognition, anaphora and co-reference, machine translation and parallel corpora, natural language generation, speech recognition, information retrieval and question answering, text classification, text summarization, as well as spell checking and authoring aid.

Noise-Driven Phenomena in Hysteretic Systems provides a general approach to nonlinear systems with hysteresis driven by noisy inputs, which leads to a unitary framework for the analysis of various stochastic aspects of hysteresis. This book includes integral, differential and algebraic models that are used to describe scalar and vector hysteretic nonlinearities originating from various areas of science and engineering. The universality of the authors approach is also reflected by the diversity of the models used to portray the input noise, from the classical Gaussian white noise to its impulsive forms, often encountered in economics and biological systems, and pink noise, ubiquitous in multi-stable electronic systems. The book is accompanied by HysterSoft© - a robust simulation environment designed to perform complex hysteresis modeling – that can be used by the reader to reproduce many of the results presented in the book as well as to research both disruptive and constructive effects of noise in hysteretic systems.

Quantum Theory: Density, Condensation, and Bonding presents in a unitary manner the main actual theories of matter, mainly the density function theory (DFT) for fermions, the Bose-Einstein condensation (BEC) for bosons, and chemical bonding as a special realization of the first two so-called mixed fermionic-bosonic states. The book covers the modern and ultimately developed quantum theories involving

the key concepts of density, condensation, and bonding. The book compiles, for the first time, the density functional theory with Bose-Einstein condensation and chemical bonding theories in a fresh and novel perspective. The book introduces modern theories of matter structure and explains the nature of chemical bonds under the consecrated and ultimate quantum paradigms of molecular structure. The book is divided into three parts, one for each level of studies: Part I: Primer Density Functional Theory is suitable for undergraduate introductory courses in physics, chemistry, and the natural sciences. Part II: Primer Density Functional Bose-Einstein Condensation Theory would be suitable for graduate- or master-level courses in physics or natural sciences. Part III: Modern Quantum Theories of Chemical Bonding is written for the post-graduate, master or doctorate courses on quantum structure of molecules in chemistry or natural sciences. Thus, this book is organized as a succession of three linked courses, from undergraduate, to graduate, to postgraduate levels in modern quantum theories of many-body systems. It covers three main concepts: density, condensation, and bonding and contains the most celebrated and challenging theories of matter. The book provides a fresh perspective on the quantum theory of structure of physico-chemical systems and will show students at all levels and researchers the way for future elaboration and discoveries toward the unification of the physical and chemical concepts of matter.

This volume is dedicated to Bill Helton on the occasion of his sixty fifth birthday. It contains biographical material, a list of Bill's publications, a detailed survey of Bill's contributions to operator theory, optimization and control and 19 technical articles. Most of the technical articles are expository and should serve as useful introductions to many of the areas which Bill's highly original contributions have helped to shape

over the last forty odd years. These include interpolation, Szegö limit theorems, Nehari problems, trace formulas, systems and control theory, convexity, matrix completion problems, linear matrix inequalities and optimization. The book should be useful to graduate students in mathematics and engineering, as well as to faculty and individuals seeking entry level introductions and references to the indicated topics. It can also serve as a supplementary text to numerous courses in pure and applied mathematics and engineering, as well as a source book for seminars.

This book constitutes the refereed proceedings of the Second International Conference on Computability in Europe, CiE 2006, held in Swansea, UK, June/July 2006. The book presents 31 revised full papers together with 30 invited papers, including papers corresponding to 8 plenary talks and 6 special sessions on proofs and computation, computable analysis, challenges in complexity, foundations of programming, mathematical models of computers and hypercomputers, and Gödel centenary: Gödel's legacy for computability.

This volume contains the papers presented at RECOMB 2010: the 14th Annual International Conference on Research in Computational Molecular Biology held in Lisbon, Portugal, during April 25–28, 2010. The RECOMB conference series was started in 1997 by Sorin Istrail, Pavel Pevzner, and Michael Waterman. RECOMB 2010 was hosted by INESC-ID and Instituto Superior Tecnico, or- nized by a committee chaired by Arlindo Oliveira and took place at the Int- national Fair of Lisbon Meeting Centre. This year, 36 papers were accepted for presentation out of 176 submissions. The papers presented were selected by the Program Committee (PC) assisted by a number of external reviewers. Each paper was reviewed by three members of the PC, or by external reviewers, and there was an extensive Web-based discussion

over a period of two weeks, leading to the ?nal decisions. RECOMB 2010 also introduced a Highlights Track, in which six additional presentations by senior authors were chosen from papers published in 2009. The RECOMB conferenceseri esiscloselyassociatedwiththeJournalofComputational Biology, which traditionally publishes special issues devoted to presenting full versions of selected conference papers. Computing the Brain provides readers with an integrated view of current informatics research related to the field of neuroscience. This book clearly defines the new work being done in neuroinformatics and offers information on resources available on the Web to researchers using this new technology. It contains chapters that should appeal to a multidisciplinary audience with introductory chapters for the nonexpert reader. Neuroscientists will find this book an excellent introduction to informatics technologies and the use of these technologies in their research. Computer scientists will be interested in exploring how these technologies might benefit the neuroscience community. An integrated view of neuroinformatics for a multidisciplinary audience Explores and explains new work being done in neuroinformatics Cross-disciplinary with chapters for computer scientists and neuroscientists An excellent tool for graduate students coming to neuroinformatics research from diverse disciplines and for neuroscientists seeking a comprehensive introduction to the subject Discusses, in-depth, the structuring of masses of data by a variety of computational models Clearly defines computational neuroscience - the use of computational techniques and metaphors to investigate relations between neural structure and function Offers a guide to resources and algorithms that can be found on the Web Written by internationally renowned experts in the field

Game Science in Hybrid Learning Spaces explores the potential, implications, and impact of game-based

approaches and interventions in response to the blurring of boundaries between digital and physical as well as formal and informal learning spaces and contexts. The book delves into the concept, opportunities, and challenges of hybrid learning, which aims to reduce the barriers of time and physical space in teaching and learning practices, fostering seamless, sustained, and measurable learning experience and outcomes beyond the barriers of formal education and physical learning contexts. Based on original research, Game Science in Hybrid Learning Spaces establishes trans-disciplinary and holistic considerations for further conceptual and empirical investigation into this topic, with the dual goals of a better understanding of the role of game-based approaches in a blended environment and of the possible structural and cultural transformation of formal education and lifelong learning. This book is an essential guide for researchers, designers, teachers, learners, and practitioners who want to better understand the relationship between games and learning that merges digital and physical experiences and blends formal and informal instructions.

This book presents the proceedings of the 1st International Symposium on Intelligent and Distributed Computing, IDC 2007, held in Craiova, Romania, October 2007. Coverage includes: autonomous and adaptive computing; data mining and knowledge discovery; distributed problem solving and decision making; e-business, e-health and e-learning; genetic algorithms; image processing; information retrieval; intelligence in mobile and ubiquitous computing.

This thesis addresses one of the most fundamental challenges for modern science: how can the brain as a network of neurons process information, how can it create and store internal models of our world, and how can it infer conclusions from ambiguous data? The author addresses these questions with the rigorous language of mathematics

and theoretical physics, an approach that requires a high degree of abstraction to transfer results of wet lab biology to formal models. The thesis starts with an in-depth description of the state-of-the-art in theoretical neuroscience, which it subsequently uses as a basis to develop several new and original ideas. Throughout the text, the author connects the form and function of neuronal networks. This is done in order to achieve functional performance of biological brains by transferring their form to synthetic electronics substrates, an approach referred to as neuromorphic computing. The obvious aspect that this transfer can never be perfect but necessarily leads to performance differences is substantiated and explored in detail. The author also introduces a novel interpretation of the firing activity of neurons. He proposes a probabilistic interpretation of this activity and shows by means of formal derivations that stochastic neurons can sample from internally stored probability distributions. This is corroborated by the author's recent findings, which confirm that biological features like the high conductance state of networks enable this mechanism. The author goes on to show that neural sampling can be implemented on synthetic neuromorphic circuits, paving the way for future applications in machine learning and cognitive computing, for example as energy-efficient implementations of deep learning networks. The thesis offers an essential resource for newcomers to the field and an inspiration for scientists working in theoretical neuroscience and the future of computing.

This book constitutes the thoroughly refereed conference proceedings of the 5th International Conference on Computational Collective Intelligence, ICCCI 2013, held in Craiova, Romania, in September 2013. The 72 revised full papers presented were carefully selected from numerous submissions. Conference papers are organized in 16 technical sessions, covering the following topics: intelligent e-

learning, classification and clustering methods, web intelligence and interaction, agents and multi-agent systems, social networks, intelligent knowledge management, language processing systems, modeling and optimization techniques, evolutionary computation, intelligent and group decision making, swarm intelligence, data mining techniques and applications, cooperative problem solving, collective intelligence for text mining and innovation, collective intelligence for social understanding and mining, and soft methods in collective intelligence.

This book constitutes the refereed proceedings of the 15th Annual International Conference on Research in Computational Molecular Biology, RECOMB 2011, held in Vancouver, Canada, in March 2011. The 43 revised full papers were carefully reviewed and selected from 153 submissions. The papers cover a wide range of topics including molecular sequence analysis; recognition of genes and regulatory elements; molecular evolution; gene expression; biological networks; sequencing and genotyping technologies; genomics; population, statistical genetics; systems biology; imaging; computational proteomics; molecular structural biology.

This book constitutes the refereed joint proceedings of six workshops on evolutionary computing, EvoWorkshops 2005, held in Lausanne, Switzerland in March/April 2005. The 56 revised full papers presented were carefully reviewed and selected from a total of 143 submissions. In accordance with the six workshops covered, the papers are organized in topical sections on evolutionary bioinformatics; evolutionary computing in communications, networks, and connected systems; hardware optimization techniques; evolutionary computation in image analysis and signal processing; evolutionary music and art; and evolutionary algorithms in stochastic and dynamic environments.

Biomolecular computing has emerged as an interdisciplinary ?eld that draws - gether chemistry, computer science, mathematics, molecular biology, and physics. Our knowledge on DNA nanotechnology and biomolecular computing increases exponentially with every passing year. The international meeting on DNA Based Computers has been a forum where scientists with di?erent backgrounds, yet sharing a common interest in biomolecular computing, meet and present their latest results. Continuing this tradition, the 8th International Meeting on DNA Based Computers (DNA8) focuses on the current theoretical and experimental results with the greatest impact. Papers and poster presentations were sought in all areas that relate to b- molecular computing, including (but not restricted to): algorithms and appli- tions, analysis of laboratory techniques/theoretical models, computational p- cesses in vitro and in vivo, DNA-computing-based biotechnological applications, DNA devices, error evaluation and correction, in vitro evolution, models of biomolecular computing (using DNA and/or other molecules), molecular - sign, nucleic acid chemistry, and simulation tools. Papers and posters with new experimental results were particularly encouraged. Authors who wished their work to be considered for either oral or poster presentation were asked to select from one of two submission “tracks”: – Track A - Full Paper – Track B - One-Page Abstract For authors with late-breaking results, or who were submitting their manuscript to a scienti?c journal, a one-page abstract, rather than a full paper, could be submitted in Track B.

Authors could (optionally) include a preprint of their full paper, for consideration only by the program committee.
This book constitutes the thoroughly refereed post-conference proceedings of the 4th International Workshop on Optical SuperComputing, OSC 2012, held in Bertinoro, Italy, in July 2012. The 11 papers presented together with 11 invited papers were carefully reviewed and selected for inclusion in this book. Being an annual forum for research presentations on all facets of optical computing for solving hard computation tasks, OCS addresses the following topics of interest: design of optical computing devices, electro-optic devices for interacting with optical computing devices, practical implementations, analysis of existing devices and case studies, optical and laser switching technologies, applications and algorithms for optical devices, alpha particles, X-rays and nano-technologies for optical computing.
Volume 5 of the 5-volume Quantum Nanochemistry focuses on modeling and predicting of the enzyme kinetics and quantitative structure-activity relationships. It reveals the quantum implications to bio-organic and bio-inorganic systems, to enzyme kinetics, and to pharmacophore binding sites of chemical-biological interaction of molecules through cell membranes in targeting specific bindings modeled by celebrated QSARs (Quantitative Structure-Activity Relationships) here reshaped as Qu-SAR (Quantum Structure-Activity Relationships).
The two-volume set LNCS 9134 and LNCS 9135 constitutes the refereed proceedings of the 42nd

International Colloquium on Automata, Languages and Programming, ICALP 2015, held in Kyoto, Japan, in July 2015. The 143 revised full papers presented were carefully reviewed and selected from 507 submissions. The papers are organized in the following three tracks: algorithms, complexity, and games; logic, semantics, automata, and theory of programming; and foundations of networked computation: models, algorithms, and information management.

The EURO-C conference series (Split 1984, Zell am See 1990, Innsbruck 1994, Badgastein 1998, St Johann im Pongau 2003, Mayrhofen 2006, Schladming 2010, St Anton am Alberg 2014) brings together researchers and practising engineers concerned with theoretical, algorithmic and validation aspects associated with computational simulations of concrete and

This two-volume set (CCIS 905 and CCIS 906) constitutes the refereed proceedings of the Second International Conference on Advances in Computing and Data Sciences, ICACDS 2018, held in Dehradun, India, in April 2018. The 110 full papers were carefully reviewed and selected from 598 submissions. The papers are centered around topics like advanced computing, data sciences, distributed systems organizing principles, development frameworks and environments, software verification and validation, computational complexity and cryptography, machine learning theory, database theory, probabilistic representations.