Informatics - Reinhard Wilhelm - 2001-02-07
Informatics - 10 Years Back, 10 Years Ahead presents a unique collection of expository papers on major current issues in the field of computer science and information technology. The 26 contributions written by leading researchers on personal invitation assess the state of the art of the field by looking back over the past decade, presenting important results, identifying relevant open problems, and developing visions for the decade to come. This book marks two remarkable and festive moments: the 10th anniversary of the International Research and Conference Center for Computer Science in Dagstuhl, Germany and the 2000th volume published in the Lecture Notes in Computer Science series.

Informatics - Reinhard Wilhelm - 2003-06-29
Informatics - 10 Years Back, 10 Years Ahead presents a unique collection of expository papers on major current issues in the field of computer science and information technology. The 26 contributions written by leading researchers on personal invitation assess the state of the art of the field by looking back over the past decade, presenting important results, identifying relevant open problems, and developing visions for the decade to come. This book marks two remarkable and festive moments: the 10th anniversary of the International Research and Conference Center for Computer Science in Dagstuhl, Germany and the 2000th volume published in the Lecture Notes in Computer Science series.
Materials informatics: a ‘hot topic’ area in materials science, aims to combine traditionally bio-led informatics with computational methodologies, supporting more efficient research by identifying strategies for time- and cost-effective analysis. The discovery and maturation of new materials has been outpaced by the thicket of data created by new combinatorial and high throughput analytical techniques. The elaboration of this "quantitative avalanche"—and the resulting complex, multi-factor analyses required to understand it—means that interest, investment, and research are revisiting informatics approaches as a solution. This work, from Krishna Rajan, the leading expert of the informatics approach to materials, seeks to break down the barriers between data management, quality standards, data mining, exchange, and storage and analysis, as a means of accelerating scientific research in materials science. This solutions-based reference synthesizes foundational physical, statistical, and mathematical content with emerging experimental and real-world applications, for interdisciplinary researchers and those new to the field. Identifies and analyzes interdisciplinary strategies (including combinatorial and high throughput approaches) that accelerate materials development cycle times and reduces associated costs Mathematical and computational analysis aids formulation of new structure-property correlations among large, heterogeneous, and distributed data sets Practical examples, computational tools, and software analysis benefits rapid identification of critical data and analysis of theoretical needs for future problems
Informatics and Mathematics, Formal Methods for Industrial Critical submissions during two rounds of evaluation and improvement. The papers are organized in topical sections on programming, software engineering, software education, program synthesis and transformation, graphical interfaces, partial evaluation and supercompilation, verification, logic and types, concurrent and distributed systems, reactive systems, program specification, verification and model checking, constraint programming, documentation and testing, databases, and natural language processing.

**Formal Methods for Industrial Critical Systems** - Stefania Gnesi - 2012-11-27

Today, formal methods are widely recognized as an essential step in the design process of industrial safety-critical systems. In its more general definition, the term formal methods encompasses all notations having a precise mathematical semantics, together with their associated analysis methods, that allow description and reasoning about the behavior of a system in a formal manner. Growing out of more than a decade of award-winning collaborative work within the European Research Consortium for Informatics and Mathematics, Formal Methods for Industrial Critical Systems: A Survey of Applications presents a number of mainstream formal methods currently used for designing industrial critical systems, with a focus on model checking. The purpose of the book is threefold: to reduce the effort required to learn formal methods, which has been a major drawback for their industrial dissemination; to help designers to adopt the formal methods which are most appropriate for their systems; and to offer a panel of state-of-the-art techniques and tools for analyzing critical systems.

**WASABI** - Christian Becker-Asano - 2008

Adaptive Motion of Animals and Machines - Hiroshi Kimura - 2006-07-28

• Motivation It is our dream to understand the principles of animals’ remarkable ability for adaptive motion and to transfer such abilities to a robot. Up to now, mechanisms for generation and control of stereotyped motions and adaptive motions in well-known simple environments have been formulated to some extent and successfully applied to robots. However, principles of adaptation to various environments havenot yet been clarified, and autonomous adaptation remains unsolved as a seriously difficult problem in robotics. Apparently, the ability of animals and robots to adapt in a real world cannot be explained or realized by one single function in a control system and mechanism. That is, adaptation in motion is induced at every level from the central nervous system to the musculoskeletal system. Thus, we organized the International Symposium on Adaptive Motion in Animals and Machines (AMAM) for scientists and engineers concerned with adaptation on various levels to bring together to discuss principles governing total systems. • History AMAM started in Montreal (Canada) in August 2000. It was organized by H. Kimura (Japan), H. Witte (Germany), G. Taga (Japan), and K. Osuka (Japan), who had agreed that having a small symposium on motion control, with people from several fields coming together to discuss specific issues, was worthwhile. Those four organizing committee members determined the scope of AMAM as follows.
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Science in the Context of Application - Martin Carrier - 2010-11-12

We increasingly view the world around us as a product of science and technology. Accordingly, we have begun to appreciate that science does not take its problems only from nature and then produces technological applications, but that the very problems of scientific research themselves are generated by science and technology. Simultaneously, problems like global warming, the toxicology of nanoparticles, or the use of renewable energies are constituted by many factors that interact with great complexity. Science in the context of application is challenged to gain new understanding and control of such complexity—it cannot seek shelter in the ivory tower or simply pursue its internal quest for understanding and gradual improvement of grand theories. Science in the Context of Application will identify, explore and assess these changes. Part I considers the "Changing Conditions of Scientific Research" and part II "Science, Values, and Society". Examples are drawn from pharmaceutical research, the information sciences, simulation modelling, nanotechnology, cancer research, the effects of commercialization, and many other fields. The book assembles papers from well-known European and American Science Studies scholars like Bernadette Bensaude-Vincent, Janet Kourany, Michael Mahoney, Margaret Morrison, Hans-Jörg Rheinberger, Arie Rip, Dan Sarewitz, Peter Weingart, and others. The individual chapters are written to address anyone who is concerned about the role of contemporary science in society, including scientists, philosophers, and policy makers.
Software and Data Technologies - José Cordeiro - 2013-01-04
This book constitutes the thoroughly refereed post-conference proceedings of the 5th International Conference on Software and Data Technologies, ICSoft 2010, held in Athens, Greece, in July 2010. The 30 revised full papers presented together with 1 invited lecture were carefully reviewed and selected from a total of 410 submissions in two rounds of reviewing and improvement. The papers cover a wide range of topics and are organized in four general topical sections on healthinf, biodevices, biosignals, and bioinformatics.

Computer Aided Verification - Warren A. Hunt, Jr. - 2011-05-02
The refereed proceedings of the 15th International Conference on Computer Aided Verification, CAV 2003, held in Boulder, CO, USA in July 2003. The 32 revised full papers and 9 tool papers presented were carefully reviewed and selected from a total of 102 submissions. The papers are organized in topical sections on bounded model checking; symbolic model checking; games, trees, and counters; tools; abstraction; dense time; infinite state systems; applications; theorem proving; automata-based verification; invariants; and explicit model checking.

Technological Innovation for Cloud-Based Engineering Systems - Luis M. Camarinha-Matos - 2015-03-27
This book constitutes the refereed proceedings of the 6th IFIP WG 5.5/SOCOLNET Doctoral Conference on Computing, Electrical and Industrial Systems, DoCEIS 2015, held in Costa de Caparica, Portugal, in April 2015. The 54 revised full papers were carefully reviewed and selected from 119 submissions. The papers present selected results produced in engineering doctoral programs and focus on development and application of cloud-based engineering systems. Research results and ongoing work are presented, illustrated and discussed in the following areas: collaborative networks; cloud-based manufacturing; reconfigurable manufacturing; distributed computing and embedded systems; perception and signal processing; healthcare; smart monitoring systems; and renewable energy and energy-related management, decision support, simulation and power conversion.
Modeling Dose-Response Microarray Data in Early Drug Development Experiments Using R - Dan Lin - 2012-08-27

This book focuses on the analysis of dose-response microarray data in pharmaceutical settings, the goal being to cover this important topic for early drug development experiments and to provide user-friendly R packages that can be used to analyze this data. It is intended for biostatisticians and bioinformaticians in the pharmaceutical industry, biologists, and biostatistics/bioinformatics graduate students. Part I of the book is an introduction, in which we discuss the dose-response setting and the problem of estimating normal means under order restrictions. In particular, we discuss the pooled-adjacent-violator (PAV) algorithm and isotonic regression, as well as inference under order restrictions and non-linear parametric models, which are used in the second part of the book. Part II is the core of the book, in which we focus on the analysis of dose-response microarray data. Methodological topics discussed include: • Multiplicity adjustment • Test statistics and procedures for the analysis of dose-response microarray data • Resampling-based inference and use of the SAM method for small-variance genes in the data • Identification and classification of dose-response curve shapes • Clustering of order-restricted (but not necessarily monotone) dose-response profiles • Gene set analysis to facilitate the interpretation of microarray results • Hierarchical Bayesian models and Bayesian variable selection • Non-linear models for dose-response microarray data • Multiple contrast tests • Multiple confidence intervals for selected parameters adjusted for the false coverage-statement rate All methodological issues in the book are illustrated using real-world examples of dose-response microarray datasets from early drug development experiments.

Construction and Analysis of Safe, Secure, and Interoperable Smart Devices - Gilles Barthe - 2005-01-21

This book constitutes the thoroughly refereed post-proceedings of the International Workshop on Construction and Analysis of Safe, Secure, and Interoperable Smart Devices, CASSIS 2004, held in Marseille, France in March 2004. The 13 revised full papers presented were carefully selected during two rounds of reviewing and improvement. The papers are devoted to trends in smart card research, operating systems and virtual machine technologies, secure platforms, security, application validation, verification, and formal modeling and formal methods.
Distributed Computing, Artificial Intelligence, Bioinformatics, Soft Computing, and Ambient Assisted Living - Sigeru Omatu - 2009-06-06

This volume (II) contains all publications accepted for the symposiums and workshops held in parallel with the 10th International Work-Conference on Artificial Neural Networks (IWANN 2009), covering a wide spectrum of technological areas such as distributed computing, artificial intelligence, bioinformatics, soft computing and ambient-assisted living: • DCAI 2009 (International Symposium on Distributed Computing and Artificial Intelligence), covering artificial intelligence and its applications in distributed environments, such as the Internet, electronic commerce, mobile communications, wireless devices, distributed computing, and so on. This event accepted a total of 96 submissions selected from a submission pool of 157 papers, from 12 different countries. • IWAAL 2009 (International Workshop of Ambient-Assisted Living), covering solutions aimed at increasing the quality of life, safety and health problems of elderly and disabled people by means of technology. This event accepted a total of 42 submissions selected from a submission pool of 78 papers, from 9 different countries. • IWPACBB 2009 (Third International Workshop on Practical Applications of Computational Biology and Bioinformatics), covering computational biology and bioinformatics as a possibility for knowledge discovery, modelling and optimization tasks, aiming at the development of computational models so that the response of biological complex systems to any perturbation can be predicted. This event accepted a total of 39 submissions selected from a submission pool of 75 papers, from 6 different countries.

A 25-Year Perspective on Logic Programming - Agostino Dovier - 2010-06-30

This book celebrates the 25th anniversary of GULP—the Italian Association for Logic Programming. Authored by Italian researchers at the leading edge of their fields, it presents an up-to-date survey of a broad collection of topics in logic programming, making it a useful reference for both researchers and students. During its 25-year existence, GULP has organised a wide range of national and international activities, including both conferences and summer schools. It has been especially active in supporting and encouraging young researchers, by providing scholarships for GULP events and awarding distinguished dissertations. We thank the international logic programming community for looking upon GULP with a combination of envy, admiration and gratitude. We are pleased to attend its
advances, catch up with old friends and meet young students. It is an honour for me to acknowledge our appreciation to GULP for its outstanding contributions to our field and to express our best wishes for its continuing prosperity in the future. March 2010 Robert Kowalski Imperial College London Preface On June 18, 1985, a group of pioneering researchers, including representatives from industry, national research labs, and academia, attended the constituent assembly of the Group of researchers and Users of Logic Programming (GULP) association. That was the starting point of a long adventure in science, that we are still experiencing 25 years later. This volume celebrates this important event.

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Foundations of Software Science and Computational Structures - Vladimiro Sassone - 2005-03-24
This book constitutes the refereed proceedings of the 8th International Conference on Foundations of Software Science and Computation Structures, FOSSACS 2005, held in Edinburgh, UK in April 2005 as part of ETAPS. The 30 revised full papers presented together with 2 invited papers were carefully reviewed and selected from 108 submissions. The papers are organized in topical sections on rule formats and bisimulation, probabilistic models, algebraic models, games and automata, language analysis, partial order models, logics, coalgebraic modal logics, and computational models.

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Embedded Software - Thomas A. Henzinger - 2001-09-26
With the omnipresence of micro devices in our daily lives, embedded software has gained tremendous importance in both science and industry. This volume contains 34 invited papers from the First International Workshop on Embedded Systems. They present latest research results from different areas of computer science that are traditionally distinct but relevant to embedded software development (such as, for example, component based design, functional programming, real-time Java, resource and storage allocation, verification). Each paper focuses on one topic, showing the inter-relationship and application to the design and implementation of embedded software systems.

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**Security and Privacy - Silver Linings in the Cloud** - Kai Rannenberg - 2010-09-02

These proceedings contain the papers of IFIP/SEC 2010. It was a special honour and privilege to chair the Program Committee and prepare the proceedings for this conference, which is the 25th in a series of well-established international conferences on security and privacy organized annually by Technical Committee 11 (TC-11) of IFIP. Moreover, in 2010 it is part of the IFIP World Computer Congress 2010 celebrating both the Golden Jubilee of IFIP (founded in 1960) and the Silver Jubilee of the SEC conference in the exciting city of Brisbane, Australia, during September 20-23. The call for papers went out with the challenging motto of “Security & Privacy Silver Linings in the Cloud” building a bridge between the long standing issues of security and privacy and the most recent developments in information and communication technology. It attracted 102 submissions. All of them were evaluated on the basis of their significance, novelty, and technical quality by at least five member of the Program Committee. The Program Committee meeting was held electronically over a period of a week. Of the papers submitted, 25 were selected for presentation at the conference; the acceptance rate was therefore as low as 24.5% making SEC 2010 a highly competitive forum. One of those 25 submissions could unfortunately not be included in the proceedings, as none of its authors registered in time to present the paper at the conference.

**Program Analysis and Compilation, Theory and Practice** - Thomas Reps - 2007-06-05

Reinhard Wilhelm's career in Computer Science spans more than a third of a century. This Festschrift volume, published to honor him on his 60th Birthday on June 10, 2006, includes 15 refereed papers by leading researchers, his graduate students and research collaborators, as well as current and former colleagues, who all attended a celebratory symposium held at Schloss Dagstuhl, Germany.

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**SOFSEM 2015: Theory and Practice of Computer Science** - Giuseppe Italiano - 2015-01-14
This book constitutes the proceedings of the 41st International Conference on Current Trends in Theory and Practice of Computer Science held in Pec pod Sněžkou, Czech Republic, during January 24-29, 2015. The book features 8 invited talks and 42 regular papers which were carefully reviewed and selected from 101 submissions. The papers are organized in topical sections named: foundations of computer science; software and Web engineering; data, information, and knowledge engineering; and cryptography, security, and verification.

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**Autonomic and Trusted Computing** - Bing Xie - 2010-10-08
Computing systems including hardware, software, communication, and networks are becoming increasingly large and heterogeneous. In short, they have become - increasingly complex. Such complexity is getting even more critical with the ubiquitous permeation of embedded devices and other pervasive systems. To cope with the growing and ubiquitous complexity, autonomic computing (AC) focuses on self-manageable computing and communication systems that exhibit self-awareness, self-configuration, self-optimization, self-healing, self-protection and other self-* properties to the maximum extent possible without human intervention or guidance. Organic computing (OC) additionally addresses adaptability, robustness, and c-trolled emergence as well as nature-inspired concepts for self-organization.

Any autonomic or organic system must be trustworthy to avoid the risk of losing control and retain confidence that the system will not fail. Trust and/or distrust relationships in the Internet and in pervasive infrastructures are key factors to enable dynamic interaction and cooperation of various users, systems, and services. Trusted/trustworthy computing (TC) aims at making computing and communication systems—as well as services—available, predictable, traceable, controllable, asse-able, sustainable, dependable, persistent, security/privacy protectable, etc. A series of grand challenges exists to achieve practical autonomic or organic systems with truly trustworthy services. Started in 2005, ATC conferences have been held at Nagasaki (Japan), Vienna (Austria), Three Gorges (China), Hong Kong (China), Oslo (Norway) and Brisbane (Australia). The 2010 proceedings contain the papers presented at the 7th International Conference on Autonomic and Trusted Computing (ATC 2010), held in Xi'an, China, October 26-29, 2010.

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**Verification, Model Checking, and Abstract Interpretation** - E. Allen Emerson - 2006-02-10
The 27 revised full papers presented here, together with one invited paper were carefully reviewed and selected from 58 submissions. The papers feature current research from the communities of verification, model checking, and abstract interpretation, facilitating interaction, cross-fertilization, and advancement of hybrid methods.

**Automata, Languages and Programming** - Michele Bugliesi - 2006-06-30
The two-volume set LNCS 4051 and LNCS 4052 constitutes the refereed proceedings of the 33rd International Colloquium on Automata, Languages and Programming, ICALP 2006, held in Venice, Italy, July 2006. In all, these volumes present more 100 papers and lectures. Volume II (4052) presents 2 invited papers and 2 additional conference tracks with 24 papers each, focusing on algorithms, automata, complexity and games as well as on security and cryptography foundation.

"This reference is a comprehensive collection of recent case studies, theories, research on digital rights management, and its place in the world today"--

**EUC 2004** - Laurence T. Yang - 2004-08-18
This book constitutes the refereed proceedings of the International Conference on Embedded and Ubiquitous Computing, EUC 2004, held in Aizu-Wakamatsu City, Japan, in August 2004. The 104 revised full papers presented were carefully reviewed and selected from more than 260 submissions. The papers are organized in topical sections on embedded hardware and software; real-time systems; power-aware computing; hardware/software codesign and systems-on-chip; mobile computing; wireless communication; multimedia and pervasive computing; agent technology and distributed computing, network protocols, security, and fault-tolerance; and middleware and peer-to-peer computing.

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The 2004 International Symposium on Computational and Information Sciences (CIS 2004) aimed at bringing researchers in the area of computational and information sciences together to exchange new ideas and to explore new ground. The goal of the conference was to push the application of modern computing technologies to science, engineering, and information technologies to a new level of sophistication and understanding. The initial idea to organize such a conference with a focus on computation and applications was originated by Dr. Jun Zhang, during his visit to China in August 2003, in consultation with a few friends, including Dr. Jing Liu at the Chinese Academy of Sciences, Dr. Jun-Hai Yong at Tsinghua University, Dr. Geng Yang at Nanjing University of Posts and Communications, and a few others. After several discussions with Dr. Ji-Huan He, it was decided that Donghua University would host CIS 2004. CIS 2004 attempted to distinguish itself from other conferences in itsphasis on participation rather than publication. A submitted paper was only reviewed with the explicit understanding that, if accepted, at least one of the authors would attend and present the paper at the conference. It is our belief that attending conferences is an important part of one’s academic career, through which academic networks can be built that may benefit one’s academic life in the long run. We also made every effort to support graduate students in attending CIS 2004. In addition to setting reduced registration fees for full-time graduate students, we awarded up to three prizes for the Best Student Papers at CIS 2004. Students whose papers were selected for awards were given cash prizes, plus a waiver of registration fees.

**Formal Concept Analysis** - Léonard Kwuida - 2010-02-18

The LNAI series reports state-of-the-art results in artificial intelligence research, development, and education, at a high level and in both printed and electronic form. Enjoying tight cooperation with the R&D community, with numerous individuals, as well as with prestigious organizations and societies, LNAI has grown into the most comprehensive artificial intelligence research forum available.

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The LNAI series reports state-of-the-art results in artificial intelligence research, development, and education, at a high level and in both printed
Informatics - 10 years back, 10 years ahead

This volume contains the proceedings of FTRTFT 2002, the International Symposium on Formal Techniques in Real-Time and Fault-Tolerant Systems, held at the University of Oldenburg, Germany, 9–12 September 2002. This symposium was the seventh in a series of FTRTFT symposia devoted to problems and solutions in safe system design. The previous symposia took place in Warwick 1990, Nijmegen 1992, Lyngby 1994, Uppsala 1996, Lyngby 1998, and Pune 2000. Proceedings of these symposia were published as volumes 331, 571, 863, 1135, 1486, and 1926 in the LNCS series by Springer-Verlag. This year the symposium was co-sponsored by IFIP Working Group 2.2 on Formal Description of Programming Concepts. The symposium presented advances in the development and use of formal techniques in the design of real-time, hybrid, fault-tolerant embedded systems, covering all stages from requirements analysis to hardware and/or software implementation. Particular emphasis was placed on UML-based development of real-time systems. Through invited presentations, links between the dependable systems and formal methods research communities were strengthened. With the increasing use of such formal techniques in industrial settings, the conference aimed at stimulating cross-fertilization between challenges in industrial usages of formal methods and advanced research.

In response to the call for papers, 39 submissions were received. Each submission was reviewed by four program committee members assisted by additional referees. At the end of the reviewing process, the program committee accepted 17 papers for presentation at the symposium.

**Innovations in Computing Sciences and Software Engineering** - Tarek Sobh - 2010-06-26

Computer Security - ESORICS 2006 - Eugene Asarin - 2006-09-21
This book constitutes the refereed proceedings of the 11th European Symposium on Research in Computer Security, ESORICS 2006. The 32 revised full papers presented were carefully reviewed and selected from 160 submissions. ESORICS is confirmed as the European research event in computer security; it presents original research contributions, case studies and implementation experiences addressing any aspect of computer security - in theory, mechanisms, applications, or practical experience.

Trust Management IV - Masakatsu Nishigaki - 2010-06-09
This volume contains the proceedings of IFIPTM 2010, the 4th IFIP WG 11.11 International Conference on Trust Management, held in Morioka, Iwate, Japan during June 16-18, 2010. IFIPTM 2010 provided a truly global platform for the reporting of research, development, policy, and practice in the interdependent arrears of privacy, security, and trust. Building on the traditions inherited from the highly successful iTrust conference series, the...
Austria, Estonia, Finland, France, Ireland, Israel, Korea, Malaysia, Norway, 2008 conference in Trondheim, Norway, and the IFIPTM 2009 conference at Purdue University in Indiana, USA, IFIPTM 2010 focused on trust, privacy and security from multidisciplinary perspectives. The conference is an arena for discussion on relevant problems from both research and practice in the areas of academia, business, and government. IFIPTM 2010 was an open IFIP conference. The program of the conference featured both theoretical research papers and reports of real-world case studies. IFIPTM 2010 received 61 submissions from 25 different countries: Japan (10), UK (6), USA (6), Canada (5), Germany (5), China (3), Denmark (2), India (2), Italy (2), Luxembourg (2), The Netherlands (2), Switzerland (2), Taiwan (2), Austria, Estonia, Finland, France, Ireland, Israel, Korea, Malaysia, Norway, Singapore, Spain, Turkey. The Program Committee selected 18 full papers for presentation and inclusion in the proceedings. In addition, the program and the proceedings include two invited papers by academic experts in the fields of trust management, privacy and security, namely, Toshio Yamagishi and Pamela Briggs.

Trust Management IV - Masakatsu Nishigaki - 2010-06-09
This volume contains the proceedings of IFIPTM 2010, the 4th IFIP WG 11.11 International Conference on Trust Management, held in Morioka, Iwate, Japan during June 16-18, 2010. IFIPTM 2010 provided a truly global platform for the reporting of research, development, policy, and practice in the interdependent areas of privacy, security, and trust. Building on the traditions inherited from the highly successful iTrust conference series, the IFIPTM 2007 conference in Moncton, New Brunswick, Canada, the IFIPTM 2008 conference in Trondheim, Norway, and the IFIPTM 2009 conference at Purdue University in Indiana, USA, IFIPTM 2010 focused on trust, privacy and security from multidisciplinary perspectives. The conference is an arena for discussion on relevant problems from both research and practice in the areas of academia, business, and government. IFIPTM 2010 was an open IFIP conference. The program of the conference featured both theoretical research papers and reports of real-world case studies. IFIPTM 2010 received 61 submissions from 25 different countries: Japan (10), UK (6), USA (6), Canada (5), Germany (5), China (3), Denmark (2), India (2), Italy (2), Luxembourg (2), The Netherlands (2), Switzerland (2), Taiwan (2), Austria, Estonia, Finland, France, Ireland, Israel, Korea, Malaysia, Norway, Singapore, Spain, Turkey. The Program Committee selected 18 full papers for presentation and inclusion in the proceedings. In addition, the program and the proceedings include two invited papers by academic experts in the fields of trust management, privacy and security, namely, Toshio Yamagishi and Pamela Briggs.

Coordination Models and Languages - Paolo Ciancarini - 2006-06-09
This book constitutes the refereed proceedings of the 8th International Conference on Coordination Models and Languages, COORDINATION 2006, held in Bologna, Italy, June 2006. The 17 revised full papers presented were carefully reviewed and selected from 50 submissions. Among the topics addressed are component connectors, negotiation in service-oriented computing, process algebraic specification, workflow patterns, reactive XML, ubiquitous coordination, type systems, ad-hoc network coordination, choreography, communication coordination, and distributed embedded systems.

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This volume contains the proceedings of ICTAC 2005, the second ICTAC, International Colloquium on Theoretical Aspects of Computing. ICTAC 2005 took place in Hanoi, Vietnam, October 17-21, 2005. ICTAC was founded by the International Institute for Software Technology of the United Nations University (UNU-IIST) to serve as a forum for practitioners, lecturers and
ETAPS 2006 was the ninth instance of the European Joint Conferences on theoretical aspects of computing and rigorous approaches to software engineering. The colloquium is aimed particularly, but not exclusively, at participants from developing countries. We believe that this will help developing countries to strengthen their research, teaching and development in computer science and engineering, improve the links between developing countries and developed countries, and establish collaboration in research and education. By providing an avenue for the discussion of common problems and their solutions, and for the exchange of experiences and ideas, this colloquium supports research and development in computer science and software technology. ICTAC is attracting more and more attention from more and more countries.

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Programming Languages and Systems - Peter Sestoft - 2006-03-29
ETAPS 2006 was the ninth instance of the European Joint Conferences on Theory and Practice of Software. ETAPS is an annual federated conference that was established in 1998 by combining a number of existing and new conferences. This year it comprised seven conferences (CC, ESOP, FASE, FOSSACS, TACAS), 18 satellite workshops (AC, CAT, AVIS, CMCS, COCV, DCC, EAAI, FESCA, FRCSS, GT-VMT, LDTA, MTB, QAPL, SC, SLAP, SPIN, TERMGRAPH, WITS and WRLA), two tutorials, and seven invited lectures (not including those that were specific to the satellite events). We received over 550 submissions to the seven conferences this year, giving an overall acceptance rate of 23%, with acceptance rates below 30% for each conference. Congratulations to all the authors who made it to the final programme! I hope that most of the other authors still found a way of participating in this exciting event and I hope you will continue submitting. The events that comprise ETAPS address various aspects of the system development process, including specification, design, implementation, analysis and improvement. The languages, methodologies and tools which support these activities are all well within its scope. Different blends of theory and practice are represented, with an inclination towards theory with a practical motivation on the one hand and soundly based practice on the other. Many of the issues involved in software design apply to systems in general, including hardware systems, and the emphasis on software is not intended to be exclusive.

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Coordination Models and Languages - Doug Lea - 2008-05-27

Modern information systems rely increasingly on combining concurrent, distributed, real-time, reconﬁgurable and heterogeneous components. New models, architectures, languages, and veriﬁcation techniques are necessary to cope with the complexity induced by the demand of today’s software development. COORDINATION aims to explore the spectrum of languages, middleware, services, and algorithms that separate behavior from interaction, therefore increasing modularity, simplifying reasoning, and ultimately enhancing software development. This volume contains the proceedings of the 10th International Conference on Coordination Models and Languages, COORDINATION 2008, held in Oslo, Norway in June 2008, as part of the federated DisCoTec conference. COORDINATION is part of a series whose proceedings have been published in LNCS volumes 1061, 1282, 1594, 1906, 2315, 2949, 3454, 4038, and 4467. From the 61 submissions received from around the world, the Program Committee selected 21 papers for presentation and publication in this volume on the basis of originality, quality, and relevance to the topics of the conference. Each submission received at least three reviews. As with previous editions, the paper submission and selection processes were managed entirely electronically. This was accomplished using EasyChair, a free Web-based conference management system. In addition to the technical paper presentations, COORDINATION 2008 hosted an invited presentation by Matt Welsh from Harvard University. We are grateful to all the Program Committee members who devoted much effort and time to read and discuss the papers. Moreover, we acknowledge the help of additional external reviewers who evaluated submissions in their area of expertise. Finally, we would like to thank the authors of all the submitted papers and the conference attendees, for keeping this research community lively and interactive, and ultimately ensuring the success of this conference series.
In this edited book various novel approaches to problems of current interest in civil engineering are demonstrated. The topics range from dynamic band seismic problems to the analysis of long-span structures and ancient buildings. Experts associated within the Lagrange Laboratory present recent research results on functionally-graded or composite materials, granular materials, geotechnics, as well as frictional or adhesive contact problems.

The need for flexibility and globalization forces enterprises to decentralize their activities and continuously (re)structure their networks of relationships regarding both their productive "supply chains" and their design and innovation processes. The goal of the ArtDeco project, funded by the Italian Ministry of Education and Scientific Research under the FIRB program (funding for basic research), has been to address these issues by proposing solutions from three main perspectives: the organizational perspective aimed at studying how companies work in a network and how their design processes can benefit from collaboration with other companies; the informational perspective focusing on how to acquire relevant knowledge from unstructured information and processes and on how to organize and manage such knowledge; and the infrastructural perspective focusing on understanding how self-adaptive workflows and software systems can help in supporting the dynamic interconnection of enterprises. The book contains a collection of papers offering an overview of the main results produced by the ArtDeco project. It has been structured into the following four main parts: organizational issues; methodologies, empirical contexts and policies; software methodologies and technologies; knowledge elicitation and management; and management of peripheral devices. It also includes a case study used throughout the book as a reference example.

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**Verification of Infinite-state Systems with Applications to Security** - Edmund Clarke - 2006-01-01

"The recent years have brought a number of advances in the development of infinite state verification, using techniques such as symbolic or parameterized representations, symmetry reductions, abstractions, constraint-based approaches, combinations of model checking and theorem proving. The active state of research on this topic provides a good time-point to increase impact by bringing together leading scientists and practitioners from these individual approaches. This volume gives an overview of the current research directions and provides information for researchers interested in the development of mathematical techniques for the analysis of infinite state systems."

**Formal Methods for Components and Objects** - Frank S. de Boer - 2006-08-10

This book presents 19 revised invited keynote lectures and revised tutorial lectures given at the 4th International Symposium on Formal Methods for Components and Objects, FMCO 2005, Amsterdam, November 2005. The book provides a unique combination of ideas on software engineering and formal methods that reflect the current interest in the application or development of formal methods for large scale software systems such as component-based systems and object systems."