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Smart Trends in Computing and Communications - Tomonobu Senjyu 2023-07-21

This book gathers high-quality papers presented at the Seventh International Conference on Smart Trends in Computing and Communications (SmartCom 2022), organized by Global Knowledge Research Foundation (GR Foundation) from January 24–25, 2023, in Jaipur, India. It covers the state-of-the-art and emerging topics in information, computer communications, and effective strategies for their use in engineering and managerial applications. It also explores and discusses the latest technological advances in, and future directions for, information and knowledge computing and its applications.

Modern Sensors, Transducers and Sensor Networks - Sergey Yurish 2014-07-14

"Modern Sensors, Transducers and Sensor Networks is the first book from the Advances in Sensors: Reviews book Series contains dozen collected sensor related, advanced state-of-the-art reviews written by 31 internationally recognized experts from academia and industry. Built upon the series Advances in Sensors: Reviews - a premier sensor review source, it presents an overview of highlights in the field. Coverage includes current developments in sensing nanomaterials, technologies, MEMS sensor design, synthesis, modeling and applications of sensors, transducers and wireless sensor networks, signal detection and advanced signal processing, as well as new sensing principles and methods of measurements. This

volume is divided into three main sections: physical sensors, chemical sensors and biosensors, and sensor networks including sensor technology, sensor market reviews and applications." -- Back cover.

Mathworks Ten - Katharine Borgen 2010

Impacting Commercialization of Rapid Hydrogen Fuel Cell Electric Vehicles (FCEV)

- David Wood 2016-02-19

Alternative propulsion technologies are becoming increasingly important with the rise of stricter regulations for vehicle efficiency, emission regulations, and concerns over the sustainability of crude oil supplies. The fuel cell is a critical component of alternative propulsion systems, and as such has many aspects to consider in its design. Fuel cell electric vehicles (FCEVs) powered by proton-exchange membrane fuel cells (PEFC) and fueled by hydrogen, offer the promise of zero emissions with excellent driving range of 300-400 miles, and fast refueling times; two major advantages over battery electric vehicles (BEVs). FCEVs face several remaining major challenges in order to achieve widespread and rapid commercialization. Many of the challenges, especially those from an FCEV system and subsystem cost and performance perspective are addressed in this book. Chapter topics include:

- impact of FCEV commercialization
- ways to address barriers to the market introduction of alternative vehicles
- new hydrogen infrastructure cost comparisons
- onboard chemical hydride storage
- optimization of a fuel

cell hybrid vehicle powertrain design
*10th International Munich Chassis Symposium
2019* - Peter E. Pfeffer 2019-11-01

The increasing automation of driving functions and the electrification of powertrains present new challenges for the chassis with regard to complexity, redundancy, data security, and installation space. At the same time, the mobility of the future will also require entirely new vehicle concepts, particularly in urban areas. The intelligent chassis must be connected, electrified, and automated in order to be best prepared for this future.

Proceedings - 1998

Analyzing Neural Time Series Data - Mike X Cohen 2014-01-17

A comprehensive guide to the conceptual, mathematical, and implementational aspects of analyzing electrical brain signals, including data from MEG, EEG, and LFP recordings. This book offers a comprehensive guide to the theory and practice of analyzing electrical brain signals. It explains the conceptual, mathematical, and implementational (via Matlab programming) aspects of time-, time-frequency- and synchronization-based analyses of magnetoencephalography (MEG), electroencephalography (EEG), and local field potential (LFP) recordings from humans and nonhuman animals. It is the only book on the topic that covers both the theoretical background and the implementation in language that can be understood by readers without extensive formal training in mathematics, including cognitive scientists, neuroscientists, and psychologists. Readers who go through the book chapter by chapter and implement the examples in Matlab will develop an understanding of why and how analyses are performed, how to interpret results, what the methodological issues are, and how to perform single-subject-level and group-level analyses. Researchers who are familiar with using automated programs to perform advanced analyses will learn what happens when they click the “analyze now” button. The book provides sample data and downloadable Matlab code. Each of the 38 chapters covers one analysis topic, and these topics progress from simple to advanced. Most chapters conclude

with exercises that further develop the material covered in the chapter. Many of the methods presented (including convolution, the Fourier transform, and Euler's formula) are fundamental and form the groundwork for other advanced data analysis methods. Readers who master the methods in the book will be well prepared to learn other approaches.

Computational Science - ICCS 2019 - João M. F. Rodrigues 2019-06-07

The five-volume set LNCS 11536, 11537, 11538, 11539, and 11540 constitutes the proceedings of the 19th International Conference on Computational Science, ICCS 2019, held in Faro, Portugal, in June 2019. The total of 65 full papers and 168 workshop papers presented in this book set were carefully reviewed and selected from 573 submissions (228 submissions to the main track and 345 submissions to the workshops). The papers were organized in topical sections named: Part I: ICCS Main Track Part II: ICCS Main Track; Track of Advances in High-Performance Computational Earth Sciences: Applications and Frameworks; Track of Agent-Based Simulations, Adaptive Algorithms and Solvers; Track of Applications of Matrix Methods in Artificial Intelligence and Machine Learning; Track of Architecture, Languages, Compilation and Hardware Support for Emerging and Heterogeneous Systems Part III: Track of Biomedical and Bioinformatics Challenges for Computer Science; Track of Classifier Learning from Difficult Data; Track of Computational Finance and Business Intelligence; Track of Computational Optimization, Modelling and Simulation; Track of Computational Science in IoT and Smart Systems Part IV: Track of Data-Driven Computational Sciences; Track of Machine Learning and Data Assimilation for Dynamical Systems; Track of Marine Computing in the Interconnected World for the Benefit of the Society; Track of Multiscale Modelling and Simulation; Track of Simulations of Flow and Transport: Modeling, Algorithms and Computation Part V: Track of Smart Systems: Computer Vision, Sensor Networks and Machine Learning; Track of Solving Problems with Uncertainties; Track of Teaching Computational Science; Poster Track ICCS 2019 Chapter “Comparing Domain-decomposition Methods for

the Parallelization of Distributed Land Surface Models” is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.

Advances in Intelligent Control Systems and Computer Science - Loan Dumitrache
2012-08-22

The conception of real-time control networks taking into account, as an integrating approach, both the specific aspects of information and knowledge processing and the dynamic and energetic particularities of physical processes and of communication networks is representing one of the newest scientific and technological challenges. The new paradigm of Cyber-Physical Systems (CPS) reflects this tendency and will certainly change the evolution of the technology, with major social and economic impact. This book presents significant results in the field of process control and advanced information and knowledge processing, with applications in the fields of robotics, biotechnology, environment, energy, transportation, et al.. It introduces intelligent control concepts and strategies as well as real-time implementation aspects for complex control approaches. One of the sections is dedicated to the complex problem of designing software systems for distributed information processing networks. Problems as complexity and specific instruments for modeling and control are also presented in a group of papers which identifies a large opening towards the new generation of CPS. The book is structured so as to ensure a good equilibrium between conceptual and applicative aspects.

Model-Based Testing for Embedded Systems - Justyna Zander 2017-12-19

What the experts have to say about Model-Based Testing for Embedded Systems: "This book is exactly what is needed at the exact right time in this fast-growing area. From its beginnings over 10 years ago of deriving tests from UML statecharts, model-based testing has matured into a topic with both breadth and depth. Testing embedded systems is a natural application of MBT, and this book hits the nail exactly on the head. Numerous topics are presented clearly, thoroughly, and concisely in this cutting-edge book. The authors are world-class leading experts in this area and teach us well-used and validated techniques, along with new ideas for

solving hard problems. "It is rare that a book can take recent research advances and present them in a form ready for practical use, but this book accomplishes that and more. I am anxious to recommend this in my consulting and to teach a new class to my students." —Dr. Jeff Offutt, professor of software engineering, George Mason University, Fairfax, Virginia, USA "This handbook is the best resource I am aware of on the automated testing of embedded systems. It is thorough, comprehensive, and authoritative. It covers all important technical and scientific aspects but also provides highly interesting insights into the state of practice of model-based testing for embedded systems." —Dr. Lionel C. Briand, IEEE Fellow, Simula Research Laboratory, Lysaker, Norway, and professor at the University of Oslo, Norway "As model-based testing is entering the mainstream, such a comprehensive and intelligible book is a must-read for anyone looking for more information about improved testing methods for embedded systems. Illustrated with numerous aspects of these techniques from many contributors, it gives a clear picture of what the state of the art is today." —Dr. Bruno Legard, CTO of Smartesting, professor of Software Engineering at the University of Franche-Comté, Besançon, France, and co-author of Practical Model-Based Testing

Information and Communication Technology for Intelligent Systems -

Tomonobu Senjyu 2020-10-21

This book gathers papers addressing state-of-the-art research in all areas of information and communication technologies and their applications in intelligent computing, cloud storage, data mining and software analysis. It presents the outcomes of the Fourth International Conference on Information and Communication Technology for Intelligent Systems, which was held in Ahmedabad, India. Divided into two volumes, the book discusses the fundamentals of various data analysis techniques and algorithms, making it a valuable resource for researchers and practitioners alike.

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Static Analysis of Software - Jean-Louis Boulanger 2013-02-07

The existing literature currently available to

students and researchers is very general, covering only the formal techniques of static analysis. This book presents real examples of the formal techniques called "abstract interpretation" currently being used in various industrial fields: railway, aeronautics, space, automotive, etc. The purpose of this book is to present students and researchers, in a single book, with the wealth of experience of people who are intrinsically involved in the realization and evaluation of software-based safety critical systems. As the authors are people currently working within the industry, the usual problems of confidentiality, which can occur with other books, is not an issue and so makes it possible to supply new useful information (photos, architectural plans, real examples).

Engineering Challenges for Sustainable Future - Noor Amila Wan Abdullah Zawawi 2016-12-01
Engineering Challenges for Sustainable Future contains the papers presented at the 3rd International Conference on Civil, Offshore & Environmental Engineering (ICCOEE2016, Kuala Lumpur, Malaysia, 15-17 August 2016), under the banner of World Engineering, Science & Technology Congress (ESTCON2016). The ICCOEE series of conferences started in Kuala Lumpur, Malaysia 2012, and the second event of the series took place in Kuala Lumpur, Malaysia 2014. This conference series deals with the civil, offshore & environmental engineering field, addressing the following topics: • Environmental and Water Resources Engineering • Coastal and Offshore Engineering • Structures and Materials • Construction and Project Management • Highway, Geotechnical and Transportation Engineering and Geo-informatics This book is an essential reading for academic, engineers and all professionals involved in the area of civil, offshore and environmental engineering.

San Francisco Focus - 1987

Sound & Vibration - 2005

American Laboratory - 1999

Predictive Approaches to Control of Complex Systems - Gorazd Karer 2012-09-20
A predictive control algorithm uses a model of the controlled system to predict the system behavior for various input scenarios and

determines the most appropriate inputs accordingly. Predictive controllers are suitable for a wide range of systems; therefore, their advantages are especially evident when dealing with relatively complex systems, such as nonlinear, constrained, hybrid, multivariate systems etc. However, designing a predictive control strategy for a complex system is generally a difficult task, because all relevant dynamical phenomena have to be considered. Establishing a suitable model of the system is an essential part of predictive control design. Classic modeling and identification approaches based on linear-systems theory are generally inappropriate for complex systems; hence, models that are able to appropriately consider complex dynamical properties have to be employed in a predictive control algorithm. This book first introduces some modeling frameworks, which can encompass the most frequently encountered complex dynamical phenomena and are practically applicable in the proposed predictive control approaches. Furthermore, unsupervised learning methods that can be used for complex-system identification are treated. Finally, several useful predictive control algorithms for complex systems are proposed and their particular advantages and drawbacks are discussed. The presented modeling, identification and control approaches are complemented by illustrative examples. The book is aimed towards researchers and postgraduate students interested in modeling, identification and control, as well as towards control engineers needing practically usable advanced control methods for complex systems.

MathWorks 10 - 2010

Mathworks Ten - Katharine Borgen 2010

Proceedings of the 10th International Conference on Rotor Dynamics - IFToMM - Katia Lucchesi Cavalca 2018-08-18
IFToMM conferences have a history of success due to the various advances achieved in the field of rotor dynamics over the past three decades. These meetings have since become a leading global event, bringing together specialists from industry and academia to promote the exchange of knowledge, ideas, and information on the

latest developments in the dynamics of rotating machinery. The scope of the conference is broad, including e.g. active components and vibration control, balancing, bearings, condition monitoring, dynamic analysis and stability, wind turbines and generators, electromechanical interactions in rotor dynamics and turbochargers. The proceedings are divided into four volumes. This second volume covers the following main topics: condition monitoring, fault diagnostics and prognostics; modal testing and identification; parametric and self-excitation in rotor dynamics; uncertainties, reliability and life predictions of rotating machinery; and torsional vibrations and geared systems dynamics.

Reactive Oxygen, Nitrogen and Sulfur Species in Plants - Mirza Hasanuzzaman 2019-07-02

Presents a multidisciplinary analysis of the integration among reactive oxygen species (ROS), reactive nitrogen species (RNS), and reactive sulfur species (RSS). Since plants are the main source of our food, the improvement of their productivity is the most important task for plant biologists. In this book, leading experts accumulate the recent development in the research on oxidative stress and approaches to enhance antioxidant defense system in crop plants. They discuss both the plant responses to oxidative stress and mechanisms of abiotic stress tolerance, and cover all of the recent approaches towards understanding oxidative stress in plants, providing comprehensive information about the topics. It also discusses how reactive nitrogen species and reactive sulfur species regulate plant physiology and plant tolerance to environmental stresses.

Reactive Oxygen, Nitrogen and Sulfur Species in Plants: Production, Metabolism, Signaling and Defense Mechanisms covers everything readers need to know in four comprehensive sections. It starts by looking at reactive oxygen species metabolism and antioxidant defense. Next, it covers reactive nitrogen species metabolism and signaling before going on to reactive sulfur species metabolism and signaling. The book finishes with a section that looks at crosstalk among reactive oxygen, nitrogen, and sulfur species based on current research done by experts. Presents the newest method for understanding oxidative stress in plants. Covers

both the plant responses to oxidative stress and mechanisms of abiotic stress tolerance Details the integration among reactive oxygen species (ROS), reactive nitrogen species (RNS) and reactive sulfur species (RSS) Written by 140 experts in the field of plant stress physiology, crop improvement, and genetic engineering Providing a comprehensive collection of up-to-date knowledge spanning from biosynthesis and metabolism to signaling pathways implicated in the involvement of RONSS to plant defense mechanisms, Reactive Oxygen, Nitrogen and Sulfur Species in Plants: Production, Metabolism, Signaling and Defense Mechanisms is an excellent book for plant breeders, molecular biologists, and plant physiologists, as well as a guide for students in the field of Plant Science.

Undocumented Secrets of MATLAB-Java Programming - Yair M. Altman 2011-12-05

For a variety of reasons, the MATLAB®-Java interface was never fully documented. This is really quite unfortunate: Java is one of the most widely used programming languages, having many times the number of programmers and programming resources as MATLAB. Also unfortunate is the popular claim that while MATLAB is a fine programming platform for prototyping, it is not suitable for real-world, modern-looking applications. Undocumented Secrets of MATLAB®-Java Programming aims to correct this misconception. This book shows how using Java can significantly improve MATLAB program appearance and functionality, and that this can be done easily and even without any prior Java knowledge. Readers are led step-by-step from simple to complex customizations. Code snippets, screenshots, and numerous online references are provided to enable the utilization of this book as both a sequential tutorial and as a random-access reference suited for immediate use. Java-savvy readers will find it easy to tailor code samples for their particular needs; for Java newcomers, an introduction to Java and numerous online references are provided. This book demonstrates how The MATLAB programming environment relies on Java for numerous tasks, including networking, data-processing algorithms and graphical user-interface (GUI) We can use MATLAB for easy access to external Java functionality, either

third-party or user-created Using Java, we can extensively customize the MATLAB environment and application GUI, enabling the creation of visually appealing and usable applications

10th International Conference on Soft Computing Models in Industrial and Environmental Applications - Álvaro Herrero
2015-05-31

This volume of *Advances in Intelligent and Soft Computing* contains accepted papers presented at the 10th International Conference on Soft Computing Models in Industrial and Environmental Applications (SOCO 2015), held in the beautiful and historic city of Burgos (Spain), in June 2015. Soft computing represents a collection or set of computational techniques in machine learning, computer science and some engineering disciplines, which investigate, simulate and analyze very complex issues and phenomena. This Conference is mainly focused on its industrial and environmental applications. After a thorough peer-review process, the SOCO 2015 International Program Committee selected 41 papers, written by authors from 15 different countries. These papers are published in present conference proceedings, achieving an acceptance rate of 40%. The selection of papers was extremely rigorous in order to maintain the high quality of the conference and we would like to thank the members of the International Program Committees for their hard work during the review process. This is a crucial issue for creation of a high standard conference and the SOCO conference would not exist without their help.

Composite Materials Technology - S.M. Sapuan
2009-12-23

Artificial neural networks (ANN) can provide new insight into the study of composite materials and can normally be combined with other artificial intelligence tools such as expert system, genetic algorithm, and fuzzy logic. Because research on this field is very new, there is only a limited amount of published literature on the subject. Compiling information from diverse sources, *Composite Materials Technology: Neural Network Applications* fills the void in knowledge of these important networks, covering composite mechanics, materials characterization, product design, and other important aspects of polymer matrix

composites. Light weight, corrosion resistance, good stiffness and strength properties, and part consolidation are just some of the reasons that composites are useful in areas including civil engineering and structure, chemical processing, management, agriculture, space study, and manufacturing. ANN has already been used to carry out design prediction, mechanical property prediction, and selection processes in the evolution of composites, but although it has already been used with great success in various branches of scientific and technological research, it is still in the nascent stage of its development. Featuring contributions from leading researchers throughout the world, this book is divided into four parts, starting with an introduction to neural networks and a review of existing literature on the subject. The text then covers structural health monitoring and damage detection in composites, addresses mechanical properties, and discusses design, analysis, and materials selection. Training, testing, and validation of experimental data were carried out to optimize the results presented in the book. This book will be an important aid to researchers as they work on the future implementation of ANN in industries such as aerospace, automotive, marine, sporting goods, furniture, and electronics and communication.

The Elements of MATLAB Style - Richard K. Johnson
2010-12-31

The Elements of MATLAB Style is a guide for both new and experienced MATLAB programmers. It provides a comprehensive collection of standards and guidelines for creating solid MATLAB code that will be easy to understand, enhance, and maintain. It is written for both individuals and those working in teams in which consistency is critical. This is the only book devoted to MATLAB style and best programming practices, focusing on how MATLAB code can be written in order to maximize its effectiveness. Just as Strunk and White's *The Elements of Style* provides rules for writing in the English language, this book provides conventions for formatting, naming, documentation, programming and testing. It includes many concise examples of correct and incorrect usage, as well as coverage of the latest language features. The author also provides recommendations on use of the integrated

development environment features that help produce better, more consistent software.

Material Flow Systems in Manufacturing -

J.M. Tanchoco 1994-09-30

This book contains a collection of contributions related to the design and control of material flow systems in manufacturing. Material flow systems in manufacturing covers a broad spectrum of topics directly affecting issues related to facilities design, material handling and production planning and control. In selecting the papers to include in this book, the scope was limited to the design and operational control aspects related to the physical movement of parts, tools, containers and material handling devices. Recent developments in this area naturally led to concentration on flow systems involving cellular manufacturing, and automated transport equipment such as automated guided vehicles. However, the concepts discussed have general applicability to a wide range of manufacturing flow problems. The book is organized in five major sections: 1. design integration and justification; 2. cell design and material handling considerations; 3. alternative material flow paths; 4. operational control problems; and 5. tooling requirements and transport equipment.

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Advances in Computing and Data Sciences -

Mayank Singh 2017-07-19

This book constitutes the refereed proceedings of the First International Conference on Advances in Computing and Data Sciences, ICACDS 2016, held in Ghaziabad, India, in November 2016. The 64 full papers were carefully reviewed and selected from 502 submissions. The papers are organized in topical sections on Advanced Computing; Communications; Informatics; Internet of Things; Data Sciences.

Real-Time Simulation Technologies: Principles, Methodologies, and Applications

- Katalin Popovici 2012-08-17

Real-Time Simulation Technologies: Principles, Methodologies, and Applications is an edited compilation of work that explores fundamental concepts and basic techniques of real-time simulation for complex and diverse systems across a broad spectrum. Useful for both new

entrants and experienced experts in the field, this book integrates coverage of detailed theory, acclaimed methodological approaches, entrenched technologies, and high-value applications of real-time simulation—all from the unique perspectives of renowned international contributors. Because it offers an accurate and otherwise unattainable assessment of how a system will behave over a particular time frame, real-time simulation is increasingly critical to the optimization of dynamic processes and adaptive systems in a variety of enterprises. These range in scope from the maintenance of the national power grid, to space exploration, to the development of virtual reality programs and cyber-physical systems. This book outlines how, for these and other undertakings, engineers must assimilate real-time data with computational tools for rapid decision making under uncertainty. Clarifying the central concepts behind real-time simulation tools and techniques, this one-of-a-kind resource: Discusses the state of the art, important challenges, and high-impact developments in simulation technologies Provides a basis for the study of real-time simulation as a fundamental and foundational technology Helps readers develop and refine principles that are applicable across a wide variety of application domains As science moves toward more advanced technologies, unconventional design approaches, and unproven regions of the design space, simulation tools are increasingly critical to successful design and operation of technical systems in a growing number of application domains. This must-have resource presents detailed coverage of real-time simulation for system design, parallel and distributed simulations, industry tools, and a large set of applications.

Implementing Models in Quantitative Finance: Methods and Cases -

Gianluca Fusai 2007-12-20

This book puts numerical methods in action for the purpose of solving practical problems in quantitative finance. The first part develops a toolkit in numerical methods for finance. The second part proposes twenty self-contained cases covering model simulation, asset pricing and hedging, risk management, statistical estimation and model calibration. Each case develops a detailed solution to a concrete

problem arising in applied financial management and guides the user towards a computer implementation. The appendices contain "crash courses" in VBA and Matlab programming languages.

Computational Science/Intelligence and Applied Informatics - Roger Lee 2019-07-25

This book gathers the outcomes of the 6th ACIS International Conference on Computational Science/Intelligence & Applied Informatics (CSII 2019), which was held on May 29-31, 2019 in Honolulu, Hawaii. The aim of the conference was to bring together researchers and scientists, businesspeople and entrepreneurs, teachers, engineers, computer users, and students to discuss the various fields of computer science and to share their experiences and exchange new ideas and information in a meaningful way. Further, they presented research results on all aspects (theory, applications and tools) of computer and information science, and discussed the practical challenges encountered in their work and the solutions they adopted to overcome them. The book highlights the best papers from those accepted for presentation at the conference. They were chosen based on review scores submitted by members of the program committee and underwent further rigorous rounds of review. From this second round, 15 of the conference's most promising papers were selected for this Springer (SCI) book and not the conference proceedings. We eagerly await the important contributions that we know these authors will make to the field of computer and information science.

NASA Tech Briefs - 1990

El-Hi Textbooks in Print, 1982 - R. R. Bowker LLC 1984-12

Industrial Use of Formal Methods - Jean-Louis Boulanger 2013-05-10

At present the literature gives students and researchers of the very general books on the formal technics. The purpose of this book is to present in a single book, a return of experience on the use of the "formal technics" (such proof and model-checking) on industrial examples for the transportation domain. This book is based on the experience of people which are completely involved in the realization and the evaluation of

safety-critical system software based. The implication of the industrialists allows to raise the problems of confidentiality which could appear and so allow to supply new useful information (photos, plan of architecture, real example).

Accelerating MATLAB Performance - Yair M. Altman 2014-12-11

The MATLAB® programming environment is often perceived as a platform suitable for prototyping and modeling but not for "serious" applications. One of the main complaints is that MATLAB is just too slow. Accelerating MATLAB Performance aims to correct this perception by describing multiple ways to greatly improve MATLAB program speed. Packed with thousands of helpful tips, it leaves no stone unturned, discussing every aspect of MATLAB. Ideal for novices and professionals alike, the book describes MATLAB performance in a scale and depth never before published. It takes a comprehensive approach to MATLAB performance, illustrating numerous ways to attain the desired speedup. The book covers MATLAB, CPU, and memory profiling and discusses various tradeoffs in performance tuning. It describes both the application of standard industry techniques in MATLAB, as well as methods that are specific to MATLAB such as using different data types or built-in functions. The book covers MATLAB vectorization, parallelization (implicit and explicit), optimization, memory management, chunking, and caching. It explains MATLAB's memory model and details how it can be leveraged. It describes the use of GPU, MEX, FPGA, and other forms of compiled code, as well as techniques for speeding up deployed applications. It details specific tips for MATLAB GUI, graphics, and I/O. It also reviews a wide variety of utilities, libraries, and toolboxes that can help to improve performance. Sufficient information is provided to allow readers to immediately apply the suggestions to their own MATLAB programs. Extensive references are also included to allow those who wish to expand the treatment of a particular topic to do so easily. Supported by an active website, and numerous code examples, the book will help readers rapidly attain significant reductions in development costs and program run times.

COTS-based Software Systems - 2003

Investigative Ophthalmology & Visual Science - 2009

COTS-Based Software Systems - Hakan Erdogmus 2003-07-01

This book constitutes the refereed proceedings of the Second International Conference on COTS-Based Software Systems, ICCBSS 2003, held in Ottawa, Canada in February 2003. The 24 revised full papers presented were carefully reviewed and selected from numerous submissions. The papers address all current issues on commercial-off-the-shelf-systems, from

the point of view of research and development as well as from the practitioner's application point of view.

Formal Methods for Safety and Security - Manju Nanda 2017-11-09

This volume is the outcome of deliberations on formal methods in aerospace. The book specially delves into the use of formal methods for verification, validation, and optimization of software in safety critical and time critical applications, such as those in aerospace engineering. The chapters in this book are authored by leading corporate and government R&D scientists. The contents of this book will be useful to researchers and professionals alike.