Introducing Galileo Desktop 2

This leading text in the field maintains its engaging, readable style while presenting a broader range of applications that motivate engineers to learn the core thermodynamics concepts. Two new coauthors help update the material and integrate engaging, new problems. Throughout the chapters, they focus on the relevance of thermodynamics to modern engineering problems. Many relevant engineering based situations are also presented to help engineers model and solve these problems.

This is a practical handbook on how to communicate science effectively. The first part is an introduction to the principles of science communication and what effective science communication is, why it is important, and how to do it. The principles in these chapters include how effective science communication can change societal paradigms and make one a better scientist. General principles relating to all science communication products include providing synthesis, visualisation, and context, assembling self-contained visual elements such as photos, maps, conceptual diagrams and data, formatting content to define and simplify terms, and eliminating jargon and acronyms. Formatting of these visual elements is also discussed. This introduction is followed by chapters outlining techniques and principles for communicating in different media & desktop publishing (including posters and newsletters), presentations and websites. Techniques in these chapters include image, colour, and font formats, resolution and design tips for different media. Finally, a case study is presented to illustrate how effective science communication has become an integral part of a successful environmental science, monitoring, planning, and implementation program. The book is accompanied by extensive internet resources, including interactive software tutorials for the different software programs commonly used in communication, discussion forums for science communication issues, and links to other websites of interest. This book will be a valuable resource for scientists, working in government, research, management agencies, and education. Although environmental scientists are the primary audience, the principles and techniques discussed are applicable to scientists from all fields.

DAPSYS (International Conference on Distributed and Parallel Systems) is an international biannual conference series dedicated to all aspects of distributed and parallel computing. DAPSYS 2008, the 7th International Conference on Distributed and Parallel Systems was held in September 2008 in Hungary. Distributed and Parallel Systems: Desktop Grid Computing, based on DAPSYS 2008, presents original research, novel concepts and methods, and outstanding results. Contributors investigate parallel and distributed techniques, algorithms, models and applications; present innovative software tools, environments and middleware; focus on various aspects of grid computing; and introduce novel methods for development, deployment, testing and evaluation. This volume features a special focus on desktop grid computing as well. Designed for a professional audience composed of practitioners and researchers in industry, this book is also suitable for advanced-level students in computer science.

For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.

Galileo Unbound traces the journey that brought us from Galileo's law of free fall to today's geneticists measuring evolutionary drift, entangled quantum particles moving among many worlds, and our lives as trajectories traversing a health space with thousands of dimensions. Remarkably, common themes persist that predict the evolution of species as readily as the orbits of planets or the collapse of stars into black holes. This book tells the history of spaces of expanding dimension and increasing abstraction and how they continue today to give new insight into the physics of complex systems. Galileo published the first modern law of motion, the Law of Fall, that was ideal and simple, laying the foundation upon which Newton built the first theory of dynamics. Early in the twentieth century, geometry became the cause of motion rather than the result when Einstein envisioned the fabric of space-time warped by mass and energy, forcing light rays to bend past the Sun. Possibly more radical was Feynman's dilemma of quantum particles taking all paths at once — setting the stage for the modern fields of quantum field theory and quantum computing. Yet as concepts of motion have evolved, one thing has remained constant, the need to track ever more complex changes and to capture their essence, to find patterns in the chaos as we try to predict and control our world.

This is a short, focused introduction to MATLAB, a comprehensive software system for mathematical and technical computing. It contains concise explanations of essential MATLAB commands, as well as easily understood instructions for using MATLAB's programming features, graphical capabilities, simulation models, and rich desktop interface. Written for MATLAB 7, it can also be used with earlier (and later) versions of MATLAB. This book teaches how to graph functions, solve equations, manipulate images, and much more. It contains explicit instructions for using MATLAB's companion software, Simulink, which allows graphical models to be built for dynamical systems. MATLAB's new "publish" feature is discussed, which allows mathematical computations to be combined with text and graphics, to produce polished, integrated, interactive documents. For the beginner it explains everything needed to start using MATLAB, while experienced users making the switch to MATLAB 7 from an earlier version will also find much useful information here.

This book introduces the problems facing Internet of Things developers and explores current technologies and techniques to help you manage, mine, and make sense of the data being collected through the use of the world's most popular database on the Internet - MySQL. The IoT is poised to change how we interact with and perceive the world around us, and the possibilities are nearly boundless. As more and more connected devices generate data, we will need to solve the problem of how to collect, store, and make sense of IoT data by leveraging the power of database systems. The book begins with an introduction of the MySQL database system and storage of sensor data. Detailed instructions and examples are provided to show how to add database nodes to IoT solutions including how to leverage MySQL high availability, including examples of how to protect data from node outages using advanced features of MySQL. The book closes with a comparison of raw and transformed data showing how transformed data can improve understandability and help you cut through a clutter of superfluous data toward the goal of mining nuggets of useful knowledge. In this book, you'll learn to: Understand the crisis of vast volumes of data from connected devices Transform data to improve reporting and reduce storage volume Store and aggregate your IoT data across multiple database servers Build localized, low-cost MySQL database servers using small and inexpensive computers Connect Arduino boards and other devices directly to MySQL database servers Build high availability MySQL solutions among low-power computing devices

Getting Started with the Intel Galileo gets you up and running with this new, x86-powered board that was developed in collaboration between Arduino and Intel. You'll learn how to set it up, connect it to your computer, and begin programming. You'll learn how to build electronics projects around the Galileo, and you'll explore the features and power that make it different from all the boards that came before. Developed in collaboration with the Intel Galileo team, and in consultation with members of the Arduino team, this is the definitive introduction to Intel's new board for makers.

Introduction to Art: Design, Context, and Meaning offers a comprehensive introduction to the world of Art. Authored by four USG faculty members with advance degrees in the arts, this textbooks offers up-to-date original scholarship. It includes over 400 high-quality images illustrating the history of art, its technical applications, and its many uses. Combining the best elements of both a traditional textbook and a reader, it introduces such issues in art as its meaning and purpose; its meaning and purpose; its structure, material, and form; and its diverse effects on our lives. Its digital nature allows students to follow links to applicable sources and videos, expanding the students' educational experiences beyond the textbook. Introduction to Art: Design, Context, and Meaning provides a new and free alternative to traditional textbooks, making it an invaluable resource in our modern age of technology and advancement.

Global positioning systems like GPS or the future European Galileo are influencing the world of navigation tremendously. Today, everybody is concerned with navigation even if unaware of this fact. Therefore, the interest in navigation is steadily increasing. This book provides an encyclopedic view of navigation. Fundamental elements are presented for a better understanding of the techniques, methods, and systems used in positioning and guidance. The book consists of three parts. Beside a historical review and maps, the first part covers mathematical and physical fundamentals. The second part treats the methods of positioning including terrestrial, celestial, radio- and satellite-based, inertial, image-based, and integrated navigation. Routing and guidance are the main topics of the third part. Applications on land, at sea, in the air, and in space are considered, followed by a critical outlook on the future of navigation. This book is designed for students, teachers, and people interested in entering the complex world of navigation.

This book constitutes the refereed proceedings of the 11th International Conference on Database Systems for Advanced Applications, DASFAA 2006, held in Singapore in April 2006. 46 revised full papers and 16 revised short papers presented were carefully reviewed and selected from 188 submissions. Topics include network, subsequence matching and repeating patterns, spatial-temporal databases, data mining, XML compression and indexing, xpath query evaluation, uncertainty and streams, peer-to-peer and distributed networks and more.

A revitalized version of the popular classic, the Encyclopedia of Library and Information Science, Second Edition targets new and dynamic movements in the distribution, acquisition, and development of print and online media-compiling articles from more than 450 information specialists on topics including program planning in the digital era, recruitment, information management, advances in digital technology and encoding, intellectual property, and hardware, software, database selection and design, competitive intelligence, electronic records preservation, decision support systems, ethical issues in information, online library instruction, telecommuting, and digital library projects.

This book constitutes the thoroughly refereed post-workshop proceedings of the Second International Symposium, SETE 2017, held in conjunction with ICWL 2017, Cape Town, South Africa, in September 2017. The 52 full and 13 short papers were carefully reviewed and selected from 123 submissions. This symposium attempts to provide opportunities for the crossfertilization of knowledge and ideas from researchers in diverse fields that make up this interdisciplinary research area.

InfoWorld is targeted to Senior IT professionals. Content is segmented into Channels and Topic Centers. InfoWorld also celebrates people, companies, and projects.

This text provides a clear introduction to the world of Geographical Information Systems and explains how they are actually used, across a variety of disciplines and within a range of industries.. Revision questions - allows students to test their understanding 'Further Study - Reading' offers sources of additional information for those who wish to explore a topic further 'Further Study - Activities' offers a selection of practical activities for the student to undertake to put into practice the techniques they have studied Companion website includes simulated spreadsheet data for students' practice, as well as multiple-choice questions, revision questions and weblinks for further investigation and lecturer resources

A comprehensive index to company and industry information in business journals.

The proceedings of STAIF-05 feature a broad spectrum of topics on space science and technology, space exploration, space colonization; advanced propulsion concepts; space nuclear power and propulsion systems technologies: thermophysics in microgravity, advanced energy conversion technologies; next generation space transportation; high temperature materials; and high power electric propulsion. These topics span the range from basic research to the recent technology advances and hardware testing.

This is a much-needed work in the financial literature, and it is the first book ever to analyse the use of Special Purpose Acquisition Companies (SPACs) from a theoretical and practical perspective. By the end of 2020, more than 240 SPACs were listed in the US (on NASDAQ or the NYSE), raising a record $83 billion. The SPAC craze has been shaking the US for months, mainly because of its simplicity: a bunch of investors decides to buy shares at a fixed price in a company that initially has no assets. In this way, a SPAC, also known as a "blank check company", is created as an empty shell with lots of money to spend on a corporate shopping spree. Could the trend be here to stay? Are SPACs the new legitimate path to traditional IPO? This book tackles those questions and more. The author provides a thorough analysis of SPACs including their legal framework and how they are used as a risk mitigation tool to structure transactions. The main objectives of the book are focused on finding a working definition for SPACs and theorising on their origins, definition, and evolution: identifying the objectives of financial regulation within the context of the recent financial crisis (2007–2010) and the one that is currently unfolding (Covid-19); and also describing practical examples of SPACs through a comparative study that, for the first time, outlines every major capital market on which SPACs are listed, in order to identify a possible international standard of regulation. The book is relevant to academics as well as policymakers, international financial regulators, corporate finance lawyers as well as to the financial industry tout court.

Both the demographics and lack of resources in the health and well-being industry are increasingly forcing us to find alternative solutions for individualized health and social care. In an effort to address this issue, smart technologies present enormous potential in solving this challenge. This book strives to enhance communication and collaboration between technology and health and social care sectors. The reader will receive an extensive overview of the possibilities of various technologies in care sectors (including ICT, electronics, automation, and sensor technology) written by experts from various countries. It will prove extremely useful for engineers developing well-being related systems, software, or other devices that can be used by professionals working with people with specialist needs, well-being and health service providers, educators teaching related courses, and upper level undergraduate students and graduate student studying related topics. The technology focus of the book is widespread and addresses elderly care and hospitals, in addition to solutions for various user groups, devices, and technologies. Beyond serving as a resource for nurses and people working in care sector, the book is also meant to give guidelines for engineers developing person-centered systems by exploring the integration of these technologies into service systems.

Empires of Knowledge charts the emergence of different kinds of scientific networks – local and long-distance, informal and institutional, religious and secular – as one of the important phenomena of the early modern world. It seeks to answer questions about what role these networks played in making knowledge, how information traveled, how it was transformed by travel, and who the brokers of this world were. Bringing together an international group of historians of science and medicine, this book looks at the changing relationship between knowledge and community in the early modern period through case studies connecting Europe, Asia, the Ottoman Empire, and the Americas. It explores a landscape of understanding (and misunderstanding) nature through examinations of well-known intelligencers such as overseas missions, trading companies, and empires while incorporating more recent scholarship on the many less prominent go-betweens, such as translators and local experts, whose thick networks of knowledge vibrant and truly global institutions. Empires of Knowledge is the perfect introduction to the global history of early modern science and medicine.

'Philosophy is written in this great book which is continually open before our eyes - I mean the universe...' Galileo's astronomical discoveries changed the way we look at the world, and our place in the universe. Threatened by the Inquisition for daring to contradict the literal truth of the Bible, Galileo ignited a scientific revolution when he asserted that the Earth moves. This generous selection from his writings contains all the essential texts for a reader to appreciate his lasting significance. Galileo's new translation renders Galileo's vigorous Italian prose into clear modern English, while William R. Shea's version of the Latin Sidereal Message makes accessible the book that created a sensation in 1610 with its account of Galileo's observations using the newly invented telescope. All Galileo's contributions to the debate on science and religion are included, as well as key documents from his trial before the Inquisition in 1633. A lively introduction and clear notes give an overview of Galileo's career and explain the scientific and philosophical background to the texts. ABOUT THE SERIES: For over 100 years Oxford World's Classics has made available the widest range of literature from around the globe. Each affordable volume reflects Oxford's commitment to scholarship, providing the most accurate text plus a wealth of other valuable features, including expert introductions by leading authorities, helpful notes to clarify the text, up-to-date bibliographies for further study, and much more.

Offers a tribute to the late scientist, with technical papers and popular essays from prominent scientists on such issues as religion and science, science education, and space science

PCMag.com is a leading authority on technology, delivering Labs-based, independent reviews of the latest products and services. Our expert industry analysis and practical solutions help you make better buying decisions and get more from technology.

For more than 30 years, historians have rejected what they call the ' warfare thesis' – the idea that there is an inevitable conflict between religion and science – insisting that scientists and believers can live in harmony. This book disagrees. Taking as its starting point the most famous of all such conflicts, the Galileo affair, it argues that religious and scientific communities exhibit very different attitudes to knowledge. Scripturally based religions not only claim a source of knowledge distinct from human reason. They are also bound by tradition, insist upon the certainty of their beliefs, and are resistant to radical criticism in ways in which the sciences are not If traditionally minded believers perceive a clash between what their faith tells them and the findings of modern science, they may well do what the Church authorities did in Galileo' s time. They may attempt to close down the science, insisting that the authority of God' s word trumps that of any ' merely human' knowledge. Those of us who value science must take care to ensure this does not happen.

Due to the complexity of operational forestry problems, computing applications are becoming pervasive in all aspects of forest and natural resource management This book provides a comprehensive introduction to computers and their applications in forest and natural resource management and is designed for both undergraduate and graduate students in forestry and natural resources. It introduces state-of-the-art applications for several of the most important computer technologies in terms of data acquisition, data manipulation, basic programming

techniques, and other related computer and Internet concepts and applications. This book consists of six parts and 19 chapters.

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This book invites the reader to understand our Universe, not just marvel at it. From the clock-like motions of the planets to the catastrophic collapse of a star into a black hole, gravity controls the Universe. Gravity is central to modern physics, helping to answer the deepest questions about the nature of time, the origin of the Universe and the unification of the forces of nature. Linking key experiments and observations through careful physical reasoning, the author builds the reader's insight step-by-step from simple but profound facts about gravity on Earth to the frontiers of research. Topics covered include the nature of stars and galaxies, the mysteries of dark matter and dark energy, black holes, gravitational waves, inflation and the Big Bang. Suitable for general readers and for undergraduate courses, the treatment uses only high-school level mathematics, supplemented by optional computer programs, to explain the laws of physics governing gravity.

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