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Scientific and Technical Aerospace Reports Dec 16 2021 Lists citations with abstracts for aerospace related reports obtained from world wide sources and announces documents that have recently been entered into the NASA Scientific and Technical Information Database.

Grid Computing Jan 17 2022 Designed for senior undergraduate and first-year graduate students, *Grid Computing: Techniques and Applications* shows professors how to teach this subject in a practical way. Extensively classroom-tested, it covers job submission and scheduling, Grid security, Grid computing services and software tools, graphical user interfaces, workflow editors, and Grid-enabling applications. The book begins with an introduction that discusses the use of a Grid computing Web-based portal. It then examines the underlying action of job submission using a command-line interface and the use of a job scheduler. After describing both general Internet security techniques and specific security mechanisms developed for Grid computing, the author focuses on Web services technologies and how they are adopted for Grid computing. He also discusses the advantages of using a graphical user interface over a command-line interface and presents a graphical workflow editor that enables users to compose sequences of computational tasks visually using a simple drag-and-drop interface. The final chapter explains how to deploy applications on a Grid. The Grid computing platform offers much more than simply running an application at a remote site. It also enables multiple, geographically distributed computers to collectively obtain increased speed and fault tolerance. Illustrating this kind of resource discovery, this practical text encompasses the varied and interconnected aspects of Grid computing, including how to design a system infrastructure and Grid portal. Supplemental Web Resources The author's Web site offers various instructional resources, including slides and links to software for programming assignments. Many of these assignments do not require access to a Grid platform. Instead, the author provides step-by-step instructions for installing open-source software to deploy and test Web and Grid services, a Grid computing workflow editor to design and test workflows, and a Grid computing portal to deploy portlets.

Hybrid Nuclear Energy Systems Mar 19 2022 *Hybrid Nuclear Energy Systems: A Sustainable Solution for the 21st Century* provides practical insights on the environmental impact of the hybrid systems

discussed, as well as important technical, economic, licensing and safety considerations. This book acts as a guide for the implementation of hybrid energy systems and authoritatively compares the benefits and possible downfalls of each technology. This enables the reader to analyze their own setting or research and evaluate the most economical and effective solution. Energy engineering researchers and professional engineers will benefit from the practical and technical approach of this book. This book will also benefit regulators and economists who will gain a clear understanding of how a hybrid system is not only designed, but also how societies will benefit from a cleaner and more abundant energy source. Provides a comprehensive analysis of hybrid energy systems and their associated benefits and possible shortcomings Provides the latest technical, environmental, economic, safety and regulatory research Ranks key energy production methods against novel hybrid systems to highlight possibilities

Geological Survey Professional Paper Oct 14 2021

The Roman City and Its Periphery Mar 27 2020 The only monograph available on the subject, this book presents archaeological and literary evidence to provide students with a full and detailed treatment of the little-investigated aspect of Roman urbanism - the phenomenon of suburban development.

Mastering Oracle Database 19c Part 1: Infrastructure Feb 06 2021 This Oracle Database 19c DBA Practical Handbook is just the first part of a series of books. Since the scope of Oracle's providence is very extensive, there is a lot to go through and implore. A thorough study of this guide will help in pertinent use of Oracle products and a great on-the-job reference for Oracle Databases.

CRREL Report Jan 05 2021

Artist's Block Cured! Jun 22 2022 Beginning and advanced artists alike have experienced "artist's block" at some point in their endeavors. Now artists can turn to this book in their time of need. *Artist's Block Cured!* provides a stimulating array of ideas for beating blank canvas syndrome and conquering other creative ailments. Broken down into four color-coded categories, beginners will find activities, lessons, quizzes, and inspiration from the Masters to help jumpstart creativity. Written by creative thinker and illustrator Linda Krall, this book is an effective and entertaining tool no artist should be without!

Altering Consciousness Sep 20 2019 This authoritative, multidisciplinary overview of altered states of consciousness (ASC) shows how their study is necessary to gain a fundamental understanding of human culture, history, and biology.

A Multigrid Tutorial Jun 10 2021 This second edition preserves the introductory spirit of the first edition while roughly doubling the amount of material covered. The topics of the first edition have been enhanced with additional discussion, new numerical experiments, and improved figures. New topics in the second edition include nonlinear equations, Neumann boundary conditions, variable mesh and variable coefficient problems, anisotropic problems, algebraic multigrid (AMG), adaptive methods, and finite elements. This introductory book is ideally suited as a companion textbook for graduate numerical analysis courses. It is written for computational mathematicians, engineers, and other scientists interested in learning about multigrid.

Beginning AutoCAD 2005 Oct 02 2020 *Beginning AutoCAD 2005* is a course based on learning and practising the essentials of 2D drawing using AutoCAD. Bob McFarlane's hands-on approach is uniquely suited to independent learning and use on courses. The focus on 2D drawing in one book, ensures the reader gets a thorough grounding in the subject, with a greater depth of coverage than tends to be available from general introductions to AutoCAD. As a result, this book provides a true, step-by-step, detailed exploration of the AutoCAD functions required at each stage of producing a 2D drawing – an approach often not found in the many software reference guides available. The emphasis on learning through doing makes this book ideal for anyone involved in engineering, construction or architecture – where the focus is on productivity and practical skills. The author has also matched the coverage to the requirements of City and Guilds, Edexcel (BTEC) and SQA syllabuses. New features in AutoCAD 2005

are covered in this book including: Drafting Tools; Drawing Management; Drawing Output; Plot and Publish Tools; Productivity Tools; Sheet Set Manager, and Tool Palette Enhancements. The result is a useful refresher course for anyone using AutoCAD at this level, and those upgrading to the new software release. The course is also designed to be fully relevant to anyone using other recent releases, including AutoCAD 2004. Bob McFarlane is Curriculum Manager for CAD and New Media at Motherwell College, Scotland, and an Autodesk Educational Developer.

Expert Oracle Exadata Jul 23 2022 *Expert Oracle Exadata*, 2nd Edition opens up the internals of Oracle's Exadata platform so that you can fully benefit from the most performant and scalable database hardware appliance capable of running Oracle Database. This edition is fully-updated to cover Exadata 5-2 and Oracle Database 12c. If you're new to Exadata, you'll soon learn that it embodies a change in how you think about and manage relational databases. A key part of that change lies in the concept of offloading SQL processing to the storage layer. In addition there is Oracle's engineering effort in creating a powerful platform for both consolidation and transaction processing. The resulting value proposition in the form of Exadata has truly been a game-changer. *Expert Oracle Exadata*, 2nd Edition provides a look at the internals and how the combination of hardware and software that comprise Exadata actually work. Authors include Martin Bach, Andy Colvin, and Frits Hoogland, with contributions from Karl Arao, and built on the foundation laid by Kerry Osborne, Randy Johnson, and Tanel Poder in the first edition. They share their real-world experience gained through a great many Exadata implementations, possibly more than any other group of experts today. Always their goal is toward helping you advance your career through success with Exadata in your own environment. This book is intended for readers who want to understand what makes the platform tick and for whom—"how" it does what it is does is as important as what it does. By being exposed to the features that are unique to Exadata, you will gain an understanding of the mechanics that will allow you to fully benefit from the advantages that the platform provides. This book changes how you think about managing SQL performance and processing. It provides a roadmap to successful Exadata implementation. And it removes the "black box" mystique. You'll learn how Exadata actually works and be better able to manage your Exadata engineered systems in support of your business. This book: Changes the way you think about managing SQL performance and processing Provides a roadmap to successful Exadata implementation Removes the "black box" mystique, showing how Exadata actually works

Smart Grids and Microgrids Sep 13 2021 **SMART GRIDS AND MICROGRIDS** Written and edited by a team of experts in the field, this is the most comprehensive and up-to-date study of smart grids and microgrids for engineers, scientists, students, and other professionals. The power supply is one of the most important issues of our time. In every country, all over the world, from refrigerators to coffee makers to heating and cooling, almost everyone in the world needs to have access to power. As the global demand rises, new methods of delivering power, such as smart grids and microgrids, have, out of necessity or choice, been developed and researched. In this book, modern and advanced concepts of both microgrid and smart grid technology are introduced. Beginning from the brief fundamental concepts of microgrids and its various constituents this team of experts discusses different architectures, control issues, communication challenges, measurement, stability, power quality and mitigation, protection, and power electronic aspects of the microgrid system. Through this book, tools and techniques needed to design both microgrids and smart grids are discussed. Recent and developing topics like smart meter impact, remote data monitoring, communication protocols, cybersecurity, artificial intelligence, big data, IoT, and many others are covered. Furthermore, this new volume also covers simulation and stability analysis tools pertaining to microgrids and smart grids. Throughout the book, detailed examples of microgrid and smart grid design and development strategies are provided, based on different constraints and requirements. Case studies, numerical models, and design examples are also included. Whether for

the veteran engineer or student, this is a must-have volume for any library. Audience: Engineers, scientists, industry professionals, students, and other lay people involved in the business of smart grids and microgrids

Can Green Sustain Growth? Apr 27 2020 Green growth has proven to be politically popular, but economically elusive. *Can Green Sustain Growth?* asks how we can move from theoretical support to implementation, and argues that this leap will require radical experimentation. But systemic change is costly, and a sweeping shift cannot be accomplished without political support, not to mention large-scale cooperation between business and government. Insightful and timely, this book brings together eight original, international case studies to consider what we can learn from the implementation of green growth strategies to date. This analysis reveals that coalitions for green experimentation emerge and survive when they link climate solutions to specific problems with near-term benefits that appeal to both environmental and industrial interests. Based on these findings, the volume delivers concrete policy recommendations for the next steps in the necessary shift toward sustainable prosperity.

Grid Computing Nov 27 2022 Identifies Recent Technological Developments Worldwide The field of grid computing has made rapid progress in the past few years, evolving and developing in almost all areas, including concepts, philosophy, methodology, and usages. *Grid Computing: Infrastructure, Service, and Applications* reflects the recent advances in this field, covering the research aspects that involve infrastructure, middleware, architecture, services, and applications. *Grid Systems Across the Globe* The first section of the book focuses on infrastructure and middleware and presents several national and international grid systems. The text highlights China Research and Development environment Over Wide-area Network (CROWN), several ongoing cyberinfrastructure efforts in New York State, and Enabling Grids for E-science (EGEE), which is co-funded by the European Commission and the world's largest multidisciplinary grid infrastructure today. The second part of the book discusses recent grid service advances. The authors examine the UK National Grid Service (NGS), the concept of resource allocation in a grid environment, OMIIBPEL, and the possibility of treating scientific workflow issues using techniques from the data stream community. The book describes an SLA model, reviews portal and workflow technologies, presents an overview of PKIs and their limitations, and introduces PIndex, a peer-to-peer model for grid information services. *New Projects and Initiatives* The third section includes an analysis of innovative grid applications. Topics covered include the WISDOM initiative, incorporating flow-level networking models into grid simulators, system-level virtualization, grid usage in the high-energy physics environment in the LHC project, and the Service Oriented HLA RTI (SOHR) framework. With a comprehensive summary of past advances, this text is a window into the future of this nascent technology, forging a path for the next generation of cyberinfrastructure developers.

Elastic Analysis of Soil-Foundation Interaction Apr 20 2022 *Developments in Geotechnical Engineering, Vol. 17: Elastic Analysis of Soil-Foundation Interaction* focuses on the analysis of the interaction between structural foundations and supporting soil media. The publication first elaborates on soil-foundation interaction problems; idealized soil response models for the analysis of soil-foundation interaction; and plane-strain analysis of an infinite plate and an infinitely long beam. Discussions focus on three-dimensional effects in the infinite beam problem, elastic models of soil behavior, foundation and interface behavior, and elastic-plastic and time-dependent behavior of soil masses. The manuscript then ponders on the analysis of beams of finite length, axisymmetric three-dimensional problem of an infinite plate, and analysis of finite plates. Concerns cover axisymmetric loading of a circular plate, analysis of rectangular plates, axisymmetric three-dimensional problem of the infinite plate, modifications of the thin plate theory, finite beams on a two-parameter elastic medium, and finite beams on an elastic solid medium. The book tackles the determination of soil parameters, experimental investigations and field studies, as well as experimental investigations and field studies and measurement and interpretation of

parameters encountered in the idealized soil models in relation to soil-foundation behavior. The publication is a valuable reference for researchers interested in the elastic analysis of soil-foundation interaction.

Oracle Exadata Expert's Handbook Oct 22 2019 The Practical, Authoritative, 360-Degree Technical Guide to Oracle Exadata: From Setup to Administration, Optimization, Tuning, and Troubleshooting The blazingly fast Oracle Exadata Database Machine is being embraced by thousands of large-scale users worldwide: by governments, the military, enterprise organizations, cloud service providers, and anyone who needs extreme performance. Now, Oracle Exadata Expert's Handbook provides authoritative guidance to running Oracle Exadata with maximum reliability, effectiveness, performance, and efficiency. Six renowned Oracle technology experts have brought together core technical information, experience, best practices, and insider tips in a concise reference. Covering both 11g and 12c versions of Oracle Exadata software, they deliver hands-on coverage of best practices, setup, migration, monitoring, administration, performance tuning, and troubleshooting. Whether you're an Oracle Exadata DBA, DMA, architect, or manager, you need these insights. Get a 360-degree overview of the Oracle Exadata Database Machine Efficiently deploy RAC within the Oracle Exadata ecosystem Fully leverage Storage Cell's extraordinary performance, via Offloading, Smart Scans, and Hybrid Columnar Compression Manage Exadata with OEM 12c: perform setup, configuration, asset/target discovery, and day-to-day administration Tune Oracle Exadata for even better performance Perform Exadata Backup/Recovery/DR with RMAN and Data Guard Migrate to Oracle Exadata from other platforms Use Oracle Exadata with the ZFS Storage Appliance Consolidate within the Exadata Database Cloud

The Navigator Nov 22 2019

The Easy Guide to Repertory Grids Feb 18 2022 A user-friendly introduction to the powerful mental mapping tool of repertory grid technique. Repertory grid technique is a system for identifying, in detail, what you or anyone else really thinks about an issue. You can use it as a tool for personal discovery, as a device for team building activities, or as a problem-solving aid. Written as a DIY guide, with a friendly expert sitting beside you, this book will teach you the technique of repertory grids step by step. Here you'll find all the information you need, alongside lots of worked examples and helpful exercises that you can use to check your understanding. The answers are in the back! If you want additional practice and resources a website that supports this book can be found at www.wiley.co.uk/easyguide Professor Devi Jankowicz is one of the leading authorities on occupational applications of personal construct theory and repertory grid technique. He has written this guide for psychology students and researchers; education students; personnel practitioners; as well as managers in the workplace. "This book's title may seem a contradiction in terms to readers who have seen the repertory grid as dauntingly complex. However, the book lives up to its title in being a very user-friendly introduction to the technique, written in a chatty style, and including numerous practical exercises, mostly not requiring use of computer software." - David Winter University of Hertfordshire and Barnet, Enfield and Haringey Mental Health NHS Trust

MEGAFLOW - Numerical Flow Simulation for Aircraft Design Dec 28 2022 The aerospace industry increasingly relies on advanced numerical simulation tools in the early design phase. This volume provides the results of a German initiative which combines many of the CFD development activities from the German Aerospace Center (DLR), universities, and aircraft industry. Numerical algorithms for structured and hybrid Navier-Stokes solvers are presented in detail. The capabilities of the software for complex industrial applications are demonstrated.

LabStudio Dec 04 2020 LabStudio: Design Research between Architecture and Biology introduces the concept of the research design laboratory in which funded research and trans-disciplinary participants achieve radical advances in science, design, and applied architectural practice. The book demonstrates to natural scientists and architects alike new approaches to more traditional design studio and hypothesis-led

research that are complementary, iterative, experimental, and reciprocal. These originate from 3-D spatial biology and generative design in architecture, creating philosophies and practices that are high-risk, non-linear, and design-driven for often surprising results. Authors Jenny E. Sabin, an architectural designer, and Peter Lloyd Jones, a spatial biologist, present case studies, prototypes, and exercises from their practice, LabStudio, illustrating in hundreds of color images a new model for seemingly unrelated, open-ended, data-, systems- and technology-driven methods that you can adopt for incredible results.

Complete Comparator Calibration May 21 2022

Learning VectorWorks 9.0 Oct 26 2022

Monthly Weather Review Feb 24 2020

RSSDI Textbook of Diabetes Mellitus Jul 31 2020 Diabetes mellitus is a group of metabolic diseases in which a person has high blood sugar, either because the body does not produce enough insulin, or because cells do not respond to the insulin that is produced. The fourth edition of Textbook of Diabetes Mellitus has been fully revised to provide clinicians with the latest developments in the field. Divided into 19 sections, the book begins with discussion on the epidemiology, physiology and metabolism of the disease; its diagnosis and classification; and aetiopathogenesis, genetics and hormone action. The following sections cover types of diabetes, including in different segments of the population; clinical features and complications; diabetes with comorbidities; and management of the disease through both pharmacotherapy and non-pharmaceutical methods. Key points Fully revised new edition presenting latest advances in diagnosis and management of diabetes mellitus Covers diabetes in different population groups and with comorbidities Highly illustrated with clinical photographs, diagrams and tables Previous edition (9789351520900) published in 2014

Special Purpose Oscillators and Amplifiers Aug 20 2019

Proportion and Style in Ancient Egyptian Art May 29 2020 This study of ancient Egyptian art reveals the evolution of aesthetic approaches to proportion and style through the ages. The painted and relief-cut walls of ancient Egyptian tombs and temples record an amazing continuity of customs and beliefs over nearly 3,000 years. Even the artistic style of the scenes seems unchanging, but this appearance is deceptive. In this work, Gay Robins offers convincing evidence, based on a study of Egyptian usage of grid systems and proportions, that innovation and stylistic variation played a significant role in ancient Egyptian art. Robins thoroughly explores the squared grid systems used by the ancient artists to proportion standing, sitting, and kneeling human figures. This investigation yields the first chronological account of proportional variations in male and female figures from the Early Dynastic to the Ptolemaic periods. Robins discusses the proportional changes underlying the revolutionary style instituted during the Amarna Period. She also considers how the grid system influenced the overall composition of scenes. Numerous line drawings with superimposed grids illustrate the text.

Beginning AutoCAD 2007 Nov 03 2020 Beginning AutoCAD 2007 is a course based on learning and practising the essentials of 2D drawing using AutoCAD. Bob McFarlane's hands-on approach is uniquely suited to independent learning and use on courses. The focus on 2D drawing in one book ensures the reader gets a thorough grounding in the subject, with a greater depth of coverage than tends to be available from general introductions to AutoCAD. As a result, this book provides a true, step-by-step, detailed exploration of the AutoCAD functions required at each stage of producing a 2D drawing - an approach often not found in the many software reference guides available. The emphasis on learning through doing makes this book ideal for anyone involved in engineering, construction or architecture - where the focus is on productivity and practical skills. The author has also matched the coverage to the requirements of City and Guilds, Edexcel (BTEC) and SQA syllabuses. The following new features in AutoCAD 2007 are covered in this book: * Create: Using enhanced commands and draughting tools to create all types of content * Manage: Using the Sheet Set Manager and Attribute Extraction to manage

data and information * Produce: Using dynamic blocks, dynamic input and selection preview to increase productivity * Share: Using e-transmit, publish to the web and PDF files to share information Plus, a new companion website features AutoCAD files for selected activities for students to work with. The result is a useful refresher course for anyone using AutoCAD at this level, and those upgrading to the new software release. The course is also designed to be fully relevant to anyone using other recent releases, including AutoCAD 2006. ABOUT THE AUTHOR Bob McFarlane has been writing books on AutoCAD for over 10 years.

Surface Modeling, Grid Generation, and Related Issues in Computational Fluid Dynamic (CFD) Solutions Aug 12 2021

Geology of the City of Brisbane Jun 29 2020

Nanoelectronics Mar 07 2021 Offering first-hand insights by top scientists and industry experts at the forefront of R&D into nanoelectronics, this book neatly links the underlying technological principles with present and future applications. A brief introduction is followed by an overview of present and emerging logic devices, memories and power technologies. Specific chapters are dedicated to the enabling factors, such as new materials, characterization techniques, smart manufacturing and advanced circuit design. The second part of the book provides detailed coverage of the current state and showcases real future applications in a wide range of fields: safety, transport, medicine, environment, manufacturing, and social life, including an analysis of emerging trends in the internet of things and cyber-physical systems. A survey of main economic factors and trends concludes the book. Highlighting the importance of nanoelectronics in the core fields of communication and information technology, this is essential reading for materials scientists, electronics and electrical engineers, as well as those working in the semiconductor and sensor industries.

From the Delta to the Cataract May 09 2021 This volume in honour of Mohamed el-Bialy offers 22 contributions by his friends and colleagues. The articles deal with a wide range of topics that include unpublished objects and texts as well as results of the most recent field research

The Physics of Diagnostic Imaging Second Edition Aug 24 2022 Over recent years there has been a vast expansion in the variety of imaging techniques available, and developments in machine specifications continue apace. If radiologists and radiographers are to obtain optimal image quality while minimising exposure times, a good understanding of the fundamentals of the radiological science underpinning diagnostic imaging is essential. The second edition of this well-received textbook continues to cover all technical aspects of diagnostic radiology, and remains an ideal companion during examination preparation and beyond. The content includes a review of basic science aspects of imaging, followed by a detailed explanation of radiological sciences, conventional x-ray image formation and other imaging techniques. The enormous technical advances in computed tomography, including multislice acquisition and 3D image reconstruction, digital imaging in the form of image plate and direct radiography, magnetic resonance imaging, colour flow imaging in ultrasound and positron radiopharmaceuticals in nuclear medicine, are all considered here. A chapter devoted to computers in radiology considers advances in radiology information systems and computer applications in image storage and communication systems. The text concludes with a series of general topics relating to diagnostic imaging. The content has been revised and updated throughout to ensure it remains in line with the Fellowship of the Royal College of Radiologists (FRCR) examination, while European and American perspectives on technology, guidelines and regulations ensure international relevance.

AutoCAD 2018 Instructor Jan 25 2020 This book is your AutoCAD 2018 Instructor. The objective of this book is to provide you with extensive knowledge of AutoCAD, whether you are taking an instructor-led course or learning on your own. AutoCAD 2018 Instructor maintains the pedagogy and in-depth coverage that have always been the hallmark of the Leach texts. As the top-selling university textbook for

almost a decade, the AutoCAD Instructor series continues to deliver broad coverage of AutoCAD in a structured, easy-to-comprehend manner. AutoCAD 2018 Instructor is command-oriented, just like AutoCAD. Chapters are structured around related commands, similar to the organization of AutoCAD's menu system. The sequence of chapters starts with fundamental drawing commands and skills and then progresses to more elaborate procedures and specialized applications. The writing style introduces small pieces of information explained in simple form, and then builds on that knowledge to deliver more complex drawing strategies, requiring a synthesis of earlier concepts. Over 2000 figures illustrate the commands, features, and ideas. AutoCAD 2018 Instructor is an ideal reference guide, unlike tutorial-oriented books where specific information is hard to relocate. Because these chapters focus on related commands, and complete coverage for each command is given in one place, the commands, procedures, and applications are easy to reference. Tabbed pages help locate tables, lists, appendices, and the comprehensive index.

Advances in Unconventional Computing Sep 25 2022 The unconventional computing is a niche for interdisciplinary science, cross-bred of computer science, physics, mathematics, chemistry, electronic engineering, biology, material science and nanotechnology. The aims of this book are to uncover and exploit principles and mechanisms of information processing in and functional properties of physical, chemical and living systems to develop efficient algorithms, design optimal architectures and manufacture working prototypes of future and emergent computing devices. This second volume presents experimental laboratory prototypes and applied computing implementations. Emergent molecular computing is presented by enzymatic logical gates and circuits, and DNA nano-devices. Reaction-diffusion chemical computing is exemplified by logical circuits in Belousov-Zhabotinsky medium and geometrical computation in precipitating chemical reactions. Logical circuits realised with solitons and impulses in polymer chains show advances in collision-based computing. Photo-chemical and memristive devices give us a glimpse on hot topics of a novel hardware. Practical computing is represented by algorithms of collective and immune-computing and nature-inspired optimisation. Living computing devices are implemented in real and simulated cells, regenerating organisms, plant roots and slime mould. The book is the encyclopedia, the first ever complete authoritative account, of the theoretical and experimental findings in the unconventional computing written by the world leaders in the field. All chapters are self-contains, no specialist background is required to appreciate ideas, findings, constructs and designs presented. This treatise in unconventional computing appeals to readers from all walks of life, from high-school pupils to university professors, from mathematicians, computers scientists and engineers to chemists and biologists.

The Grid Book Jul 11 2021 Ten grids that changed the world: the emergence and evolution of the most prominent visual structure in Western culture. Emblematic of modernity, the grid is the underlying form of everything from skyscrapers and office cubicles to paintings by Mondrian and a piece of computer code. And yet, as Hannah Higgins makes clear in this engaging and evocative book, the grid has a history that long predates modernity; it is the most prominent visual structure in Western culture. In *The Grid Book*, Higgins examines the history of ten grids that changed the world: the brick, the tablet, the gridiron city plan, the map, musical notation, the ledger, the screen, moveable type, the manufactured box, and the net. Charting the evolution of each grid, from the Paleolithic brick of ancient Mesopotamia through the virtual connections of the Internet, Higgins demonstrates that once a grid is invented, it may bend, crumble, or shatter, but its organizing principle never disappears. The appearance of each grid was a watershed event. Brick, tablet, and city gridiron made possible sturdy housing, the standardization of language, and urban development. Maps, musical notation, financial ledgers, and moveable type promoted the organization of space, music, and time, international trade, and mass literacy. The screen of perspective painting heralded the science of the modern period, classical mechanics, and the screen arts,

while the standardization of space made possible by the manufactured box suggested the purified box forms of industrial architecture and visual art. The net, the most ancient grid, made its first appearance in Stone Age Finland; today, the loose but clearly articulated networks of the World Wide Web suggest that we are in the middle of an emergent grid that is reshaping the world, as grids do, in its image.

Beginning AutoCAD 2007 Sep 01 2020 This title is aimed at new AutoCAD users and experienced users wishing to upgrade their skills from previous releases to AutoCAD 2007. It introduces readers to the essential basic 2D draughting skills required by every AutoCAD user, whether at the introductory, intermediate, or advanced level.

Modeling and Computation in Environmental Sciences Dec 24 2019 This volume contains 20 contributions to the 1st GAMM-Seminar at ICA Stuttgart, which was held in Stuttgart, October 12 - 13, 1995. In the field of environmental sciences, numerical procedures for the simulation of ecological problems are growing increasingly topical. The solution of typical problems in environmental research is closely connected with numerical supercomputing. The main subject of the seminar was the modeling and numerical simulation of ground water and soil water. Further topics were multi-scale modeling, special discretization schemes, adaptivity, multi-grid methods, heterogeneity, parameter identification, homogenization, density driven groundwater flow, and coupling of transport and chemistry.

Action Amiga Apr 08 2021 This manual provides easy to follow, step-by-step instruction in the use of various graphic, animation and video production software for the Commodore Amiga personal computer. The manual assumes that the user knows nothing about computers so each step and its consequences are explained completely from turning on the computer to saving a disk and printing the screen image. Many excellent programs have been designed for the Amiga which are compatible with each other sharing the IFF format. They may be used to create art by computer without prior computer experience or any knowledge of programming. This manual introduces some of these programs and present applications for their use. In addition various hardware peripherals are described which allow multi-media and video production. The book should be used with the various programs operating as their own illustrations on the monitor screen. The final chapter is a gallery of computer generated images.

Forensic Document Examination in the 21st Century Nov 15 2021 Forensic Document Examination in the 21st Century covers the latest technology and techniques providing a complete resource on contemporary issues and methods in forensic document examination. Forensic document examiners provide their findings as expert testimony in court. Due to rapid changes in technology, including digital documents, printing and photocopying capabilities, and more, there is a great need for this up-to-date reference. The examination of documents can include comparison of handwriting or hand-printing; detection of alterations or photocopier and computer manipulation; restoration or decipherment of erased and obliterated writing; visualization of latent impressions; the identification of printing processes; and differentiation of inks. Computer-generated documents are prevalent, and electronically-captured signatures are becoming more widespread, meaning the knowledge of advances in technology and adoption of new validated techniques and methods of document examination are crucial to the reliability of forensic opinions. Forensic Document Examination in the 21st Century includes the latest research on the subject and with contributions from leading experts on their various areas of expertise. The book will be a welcome addition to the literature and support the foundational basis for methods and procedures for use it expert testimony in court, serving as a resource for forensic document examiners, trainees, and those in the criminal and legal communities who use the services of expert document examiners and witnesses

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