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This book constitutes the refereed proceedings of the 9th Pacific Rim International Conference on Artificial Intelligence, PRICAI 2006, held in Guilin, China in August 2006. The 81 revised full papers and 87 revised short papers presented together with 3 keynote talks were carefully reviewed and selected from 596 submissions. The papers are organized in topical sections on intelligent agents, automated reasoning, machine learning and data mining, natural language processing and speech recognition, computer vision, perception and animation, evolutionary computing, industrial applications, intelligent agents, automated reasoning, evolutionary computing, game, machine learning and data mining, information retrieval, natural language processing, neural networks, and computer vision.

TheAMDO-e2006conferencetookplaceattheHotelMonPort, Portd'Andratx (Mallorca), on July 11-14, 2006, sponsored by the International Association for Pattern Recognition (IAPR), the MEC (Ministerio de Educaciþ on y Ciencia, SpanishGovernment), theConselleriad'Economia, HisendaiInnovaciþ o(Balearic Islands Government), the AERFAI (Spanish Association in Pattern Recognition and Arti?cial Intelligence), the EG (Eurographics Association) and the Ma- ematics and Computer Science Department of the UIB. Important commercial sponsorsalsocollaboratedwithpracticaldemonstrations;themaincontributions were from: VICOM Tech, ANDROME Iberica, GroupVision, Ndigital (NDI), CESA and TAGrv. The subject of the conference was ongoing research in articulated motion on a sequence of images and sophisticated models for deformable objects. The goals of these areas are to understand and interpret the motion of complex objects that can be found in sequences of images in the real world. The main topics considered as priority were: geometric and physical deformable models, motion analysis, articulated models and animation, modelling and visualization of deformable models, deformable models applications, motion analysis appli- tions, single or multiple human motion analysis and synthesis, face modelling, tracking, recovering and recognition models, virtual and augmented reality, haptics devices, biometrics techniques. These topics were grouped into four tracks: Track 1: Computer Graphics (Human Modelling and Animation), Track 2: Human Motion (Analysis, Tracking, 3D Reconstruction and Rec- nition), Track 3: Multimodal User Interaction (VR and AR, Speech, Biom- rics) and Track 4: Advanced Multimedia Systems (Standards, Indexed Video Contents). This conference was the natural evolution of the AMDO2004 workshop (Springer LNCS 3179).

Numerical Methods for Engineers retains the instructional techniques that have made the text so successful. Chapra and Canale's unique approach opens each part of the text with sections called "Motivation" "Mathematical Background" and "Orientation". Each part closes with an "Epilogue" containing "Trade-Offs" "Important Relationships and Formulas" and "Advanced Methods and Additional References". Much more than a summary the Epilogue deepens understanding of what has been learned and provides a peek into more advanced methods. Numerous new or revised problems are drawn from actual engineering practice. The expanded breadth of engineering disciplines covered is especially evident in these exercises which now cover such areas as biotechnology and biomedical engineering. Excellent new examples and case studies span all areas of engineering giving

students a broad exposure to various fields in engineering.McGraw-Hill Education's Connect is also available as an optional add on item. Connect is the only integrated learning system that empowers students by continuously adapting to deliver precisely what they need when they need it how they need it so that class time is more effective. Connect allows the professor to assign homework quizzes and tests easily and automatically grades and records the scores of the student's work. Problems are randomized to prevent sharing of answers an may also have a "multi-step solution" which helps move the students' learning along if they experience difficulty.

ESource-Prentice Hall's Engineering Source-provides a comprehensive, customizable introductory engineering and computing library. Featuring over 25 modules and growing, ESource allows users to fully customize their books through the ESource website. Using the ESource online BookBuild system at www.prenhall.com/esource, users can view and select book chapters, change the sequence, instantly calculate the book's net (bookstore) price, request a free examination copy, and generate an ISBN for placing a bookstore order. Mathcad as a Design Tool; Mathcad as a Mathematical Problem Solver; Mathcad Fundamentals; Mathcad Functions; Trigonometric Functions; Advanced Mathematics Functions; Mathcad's Matrix Definitions; Array Operations; Graphing With Mathcad; Programming in Mathcad; Symbolic Matrix Math; and Numerical Techniques. For professionals in General Engineering or Computer Science fields.

Part of Esource—Prentice Hall's Engineering Source, this book provides a flexible introduction to the use of Word in engineering. Featuring over 25 modules and growing, the ESource series provides a comprehensive resource of essential engineering topics. Covers topics such as formatting documents, using tables in documents, and writing technical documents. For any Engineer or Computer Scientist interested in a brief introduction to Word.

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Indexes materials appearing in the Society's Journals, Transactions, Manuals and reports, Special publications, and Civil engineering.

This new edition provides an updated approach for students, engineers, and researchers to apply numerical methods for solving problems using MATLAB® This accessible book makes use of MATLAB® software to teach the fundamental concepts for applying numerical methods to solve practical engineering and/or science problems. It presents programs in a complete form so that readers can run them instantly with no programming skill, allowing them to focus on understanding the mathematical manipulation process and making interpretations of the results. Applied Numerical Methods Using MATLAB®, Second Edition begins with an introduction to MATLAB usage and computational errors, covering everything from input/output of data, to various kinds of computing errors, and on to parameter sharing and passing, and more. The system of linear equations is covered next, followed by a chapter on the interpolation by Lagrange polynomial. The next sections look at interpolation and curve fitting, nonlinear equations, numerical differentiation/integration, ordinary differential equations, and optimization. Numerous methods such as the Simpson, Euler, Heun, Runge-kutta, Golden Search, Nelder-Mead, and more are all covered in

those chapters. The eighth chapter provides readers with matrices and Eigenvalues and Eigenvectors. The book finishes with a complete overview of differential equations. Provides examples and problems of solving electronic circuits and neural networks Includes new sections on adaptive filters, recursive least-squares estimation, Bairstow's method for a polynomial equation, and more Explains Mixed Integer Linear Programing (MILP) and DOA (Direction of Arrival) estimation with eigenvectors Aimed at students who do not like and/or do not have time to derive and prove mathematical results Applied Numerical Methods Using MATLAB®, Second Edition is an excellent text for students who wish to develop their problem-solving capability without being involved in details about the MATLAB codes. It will also be useful to those who want to delve deeper into understanding underlying algorithms and equations.

Steven Chapra’s second edition, Applied Numerical Methods with MATLAB for Engineers and Scientists, is written for engineers and scientists who want to learn numerical problem solving. This text focuses on problem-solving (applications) rather than theory, using MATLAB, and is intended for Numerical Methods users; hence theory is included only to inform key concepts. The second edition feature new material such as Numerical Differentiation and ODE's: Boundary-Value Problems. For those who require a more theoretical approach, see Chapra's best-selling Numerical Methods for Engineers, 5/e (2006), also by McGraw-Hill.

Watershed modeling is at the heart of modern hydrology, supplying rich information that is vital to addressing resource planning, environmental, and social problems. Even in light of this important role, many books relegate the subject to a single chapter while books devoted to modeling focus only on a specific area of application. Recognizing the

The fifth edition of "Numerical Methods for Engineers" continues its tradition of excellence. Instructors love this text because it is a comprehensive text that is easy to teach from. Students love it because it is written for them--with great pedagogy and clear explanations and examples throughout. The text features a broad array of applications, including all engineering disciplines. The revision retains the successful pedagogy of the prior editions. Chapra and Canale's unique approach opens each part of the text with sections called Motivation, Mathematical Background, and Orientation, preparing the student for what is to come in a motivating and engaging manner. Each part closes with an Epilogue containing sections called Trade-Offs, Important Relationships and Formulas, and Advanced Methods and Additional References. Much more than a summary, the Epilogue deepens understanding of what has been learned and provides a peek into more advanced methods. Approximately 80% of the end-of-chapter problems are revised or new to this edition. The expanded breadth of engineering disciplines covered is especially evident in the problems, which now cover such areas as biotechnology and biomedical engineering. Users will find use of software packages, specifically MATLAB and Excel with VBA. This includes material on developing MATLAB m-files and VBA macros.

http: //www.prenhall.com/esource FEATURES: Highlights the topics taught in the first two years of the traditional engineering curriculum. Introduces students to analysis methodology that they will utilize in the engineering disciplines they pursue. Mathematics is included, but kept at a level appropriate for the freshman engineering student.

Focusing on fundamental principles, Hydro-Environmental Analysis: Freshwater Environments presents in-depth information about freshwater environments and how they are influenced by regulation. It provides a holistic approach, exploring the factors that impact water quality and quantity, and the regulations, policy and management methods that are necessary to maintain this vital resource. It offers a historical viewpoint as well as an overview and foundation of the physical, chemical, and biological characteristics affecting the management of freshwater environments. The book concentrates on broad and general concepts, providing an interdisciplinary foundation. The author covers

the methods of measurement and classification; chemical, physical, and biological characteristics; indicators of ecological health; and management and restoration. He also considers common indicators of environmental health; characteristics and operations of regulatory control structures; applicable laws and regulations; and restoration methods. The text delves into rivers and streams in the first half and lakes and reservoirs in the second half. Each section centers on the characteristics of those systems and methods of classification, and then moves on to discuss the physical, chemical, and biological characteristics of each. In the section on lakes and reservoirs, it examines the characteristics and operations of regulatory structures, and presents the methods commonly used to assess the environmental health or integrity of these water bodies. It also introduces considerations for restoration, and presents two unique aquatic environments: wetlands and reservoir tailwaters. Written from an engineering perspective, the book is an ideal introduction to the aquatic and limnological sciences for students of environmental science, as well as students of environmental engineering. It also serves as a reference for engineers and scientists involved in the management, regulation, or restoration of freshwater environments.

ESourcePrentice Hall's Engineering Sourceprovides a comprehensive, customizable introductory engineering and computing library. Featuring over 25 modules and growing, ESource allows users to fully customize their books through the ESource website. Using the ESource online BookBuild system at www.prenhall.com/esource, users can view and select book chapters, change the sequence, instantly calculate the book's net (bookstore) price, request a free examination copy, and generate an ISBN for placing a bookstore order. Engineering professionalism; Ethical theories; Ethical problem solving techniques; Applications; and Codes of ethics of major engineering societies. For professionals in General Engineering or Computer Science fields.

Watershed ModelsCRC Press

This book constitutes the refereed proceedings of the Third International Conference on Computer Vision/Computer Graphics collaboration techniques involving image analysis/synthesis approaches MIRAGE 2007, held in Rocquencourt, France, in March 2007. The 55 revised full cover foundational, methodological, and application issues.

Part of ESource—Prentice Hall's Engineering Source, this book provides a flexible introduction to Maple 6. Featuring over 25 modules and growing, the ESource series provides a comprehensive resource of engineering topics. Introduction to Maple; Maple Overview; Maple Language; Expressions and Assignments; Maple Types; Functions; Manipulating Expressions; Graphics; Substituting, Evaluating, and Solving; Systems of Equations; Introduction to Calculus. For any Engineer or Computer Scientist interested in a brief introduction to the subject.

National and international interest in finding rational and economical approaches to water-quality management is at an all-time high. Insightful application of mathematical models, attention to their underlying assumptions, and practical sampling and statistical tools are essential to maximize a successful approach to water-quality modeling. Chapra has organized this user-friendly text in a lecture format to engage students who want to assimilate information in manageable units. Comical examples and literary quotes interspersed throughout the text motivate readers to view the material in the proper context. Coverage includes the necessary issues of surface water modeling, such as reaction kinetics, mixed versus

nonmixed systems, and a variety of possible contaminants and indicators; environments commonly encountered in water-quality modeling; model calibration, verification, and sensitivity analysis; and major water-quality-modeling problems. Most formulations and techniques are accompanied by an explanation of their origin and/or theoretical basis. Although the book points toward numerical, computer-oriented applications, strong use is made of analytical solutions. In addition, the text includes extensive worked examples that relate theory to applications and illustrate the mechanics and subtleties of the computations.

Part of Esource—Prentice Hall's Engineering Source, this book provides a flexible introduction to the use of Excel in engineering. Featuring over 25 modules and growing, the ESource series provides a comprehensive resource of essential engineering topics. Covers topics such as formatting data, formulas and functions, data analysis, database management, collaborating, and the World Wide Web. For any Engineer or Computer Scientist interested in a brief introduction to Excel.

Provides information about admission, financial aid, programs and institutions, and research specialties within the fields of engineering and applied sciences, including civil engineering, information technology, and bioengineering.

Good,No Highlights,No Markup,all pages are intact, Slight Shelfwear,may have the corners slightly dented, may have slight color changes/slightly damaged spine.

This research aims to investigate the role or roles of the physical Jerusalem temple within the second temple Jewish writings in terms of whether the physical temple has any role to play in relation to the pivot point in eschatology. The pivot point or fulcrum in time refers to the end of the exile and perhaps the beginning of the eschaton. The exile may be theological, but many second temple Jewish texts address the physical gathering of the children of Israel to the land of Israel (i.e., from physical exile, even if the text also addresses a theological exile), thus, making the return a complete ingathering of the children of Israel. The passages of these ancient texts have been analysed before, but never with this lens. Looking to see if there is any role the Jerusalem Temple performs in expected eschatological events will at least allow an answer to be given, which is better than never asking the question in the first place, which has been the case until now. This study produces results as the Jerusalem Temple has always been a place of great expectations.

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