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Computer Vision - Richard Szeliski 2010-09-30

Computer Vision: Algorithms and Applications explores the variety of techniques commonly used to analyze and interpret images. It also describes challenging real-world applications where vision is being successfully used, both for specialized applications such as medical imaging, and for fun, consumer-level tasks such as image editing and stitching, which students can apply to their own personal photos and videos. More than just a source of "recipes," this exceptionally authoritative and comprehensive textbook/reference also takes a scientific approach to basic vision problems, formulating physical models of the imaging process before inverting them to produce descriptions of a scene. These problems are also analyzed using statistical models and solved using rigorous engineering techniques. Topics and features: structured to support active curricula and project-oriented courses, with tips in the Introduction for using the book in a variety of customized courses; presents exercises at the end of each chapter with a heavy emphasis on testing algorithms and containing numerous suggestions for small mid-term projects; provides additional material and more detailed mathematical topics in the Appendices, which cover linear algebra, numerical techniques, and Bayesian estimation theory; suggests additional reading at the end of each chapter, including the latest research in each sub-field, in addition to a full Bibliography at the end of the book; supplies supplementary course material for students at the associated website, <http://szeliski.org/Book/>. Suitable for an upper-level undergraduate or graduate-level course in computer science or engineering, this textbook focuses on basic techniques that work under real-world conditions and encourages students to push their creative boundaries. Its design and exposition also make it eminently suitable as a unique reference to the fundamental techniques and current research literature in computer vision.

Introducing Microsoft Power BI - Alberto Ferrari 2016-07-07

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Introducing Microsoft Power BI enables you to evaluate when and how to use Power BI. Get inspired to improve business processes in your company by leveraging the available analytical and collaborative features of this environment. Be sure to watch for the publication of Alberto Ferrari and Marco Russo's upcoming retail book, *Analyzing Data with Power BI and Power Pivot for Excel* (ISBN 9781509302765). Go to the book's page at the Microsoft Press Store here for more details:<http://aka.ms/analyzingdata/details>. Learn more about Power BI at <https://powerbi.microsoft.com/>.

Genetic Algorithms in Search, Optimization, and Machine Learning - David Edward Goldberg 1989

A gentle introduction to genetic algorithms. Genetic algorithms revisited: mathematical foundations. Computer implementation of a genetic algorithm. Some applications of genetic algorithms. Advanced operators and techniques in genetic search. Introduction to genetics-based machine learning. Applications of genetics-based machine learning. A look back, a glance ahead. A review of combinatorics and elementary probability. Pascal with random number generation for fortran, basic, and cobol programmers. A simple genetic algorithm (SGA) in pascal. A simple classifier system(SCS) in pascal. Partition coefficient transforms for problem-coding analysis.

Autophagy - Daniel Klionsky 2003-12-15

Starting in the early 1970s, a type of programmed cell death called apoptosis began to receive attention. Over the next three decades, research in this area continued at an accelerated rate. In the early 1990s, a second type of programmed cell death, autophagy, came into focus. Autophagy has been studied in mammalian cells for many years. The recen

Architectures for Computer Vision - Hong Jeong 2014

This book provides comprehensive coverage of 3D vision systems, from vision models and state-of-the-art algorithms to their hardware architectures for implementation on DSPs, FPGA and ASIC chips, and GPUs. It aims to fill the gaps between computer vision algorithms and real-time digital circuit implementations, especially with Verilog HDL design. The organization of this book is vision and hardware module directed, based on Verilog vision modules, 3D vision modules, parallel vision architectures, and Verilog designs for the stereo matching system with various parallel architectures. It provides Verilog vision simulators, tailored to the design and testing of general vision chips. It bridges the differences between C/C++ and HDL to encompass both software realization and chip implementation; includes numerous examples that realize vision algorithms and general vision processing in HDL. It is unique in providing an organized and complete overview of how a real-time 3D vision system-on-chip can be designed. It focuses on the digital VLSI aspects and implementation of digital signal processing tasks on hardware platforms such as ASICs and FPGAs for 3D vision systems, which have not been comprehensively covered in one single book. It provides a timely view of the pervasive use of vision systems and the challenges of fusing information from different vision modules. The accompanying website includes software and HDL code packages to enhance further learning and develop advanced systems. A solution set and lecture slides are provided on the book's companion website. The book is aimed at graduate students and researchers in computer vision and embedded systems, as well as chip and FPGA designers. Senior undergraduate students specializing in VLSI design or computer vision will also find the book to be helpful in understanding advanced applications.

Sentiment Analysis and Opinion Mining - Bing Liu 2012

Sentiment analysis and opinion mining is the field of study that analyzes people's opinions, sentiments, evaluations, attitudes, and emotions from written language. It is one of the most active research areas in natural language processing and is also widely studied in data mining, Web mining, and text mining. In fact, this research has spread outside of computer science to the management sciences and social sciences due to its importance to business and society as a whole. The growing importance of sentiment analysis coincides with the growth of social media such as reviews, forum discussions, blogs, micro-blogs, Twitter, and social networks. For the first time in human history, we now have a huge volume of opinionated data recorded in digital form for analysis. Sentiment analysis systems are being applied in almost every business and social domain because opinions are central to almost all human activities and are key influencers of our behaviors. Our beliefs and perceptions of reality, and the choices we make, are largely conditioned on how others see and evaluate the world. For this reason, when we need to make a decision we often seek out the opinions of others. This is true not only for individuals but also for organizations. This book is a comprehensive introductory and survey text. It covers all important topics and the latest developments in the field with over 400 references. It is suitable for students, researchers and practitioners who are interested in social media analysis in general and sentiment analysis in particular. Lecturers can readily use it in class for courses on natural language processing, social media analysis, text mining, and data mining. Lecture slides are also available online. Table of Contents: Preface / Sentiment Analysis: A Fascinating Problem / The Problem of Sentiment Analysis / Document Sentiment Classification / Sentence Subjectivity and Sentiment Classification / Aspect-Based Sentiment Analysis / Sentiment Lexicon Generation / Opinion Summarization / Analysis of Comparative Opinions / Opinion Search and Retrieval / Opinion Spam Detection / Quality of Reviews / Concluding Remarks / Bibliography / Author Biography

Multidimensional Signal, Image, and Video Processing and Coding - John

W. Woods 2011-05-31

This book gives a concise introduction to both image and video processing, providing a balanced coverage between theory, applications and standards. It gives an introduction to both 2-D and 3-D signal processing theory, supported by an introduction to random processes and some essential results from information theory, providing the necessary foundation for a full understanding of the image and video processing concepts that follow. A significant new feature is the explanation of practical network coding methods for image and video transmission. There is also coverage of new approaches such as: super-resolution methods, non-local processing, and directional transforms. This book also has on-line support that contains many short MATLAB programs that complement examples and exercises on multidimensional signal, image, and video processing. There are numerous short video clips showing applications in video processing and coding, plus a copy of the vidview video player for playing .yuv video files on a Windows PC and an illustration of the effect of packet loss on H.264/AVC coded bitstreams. New to this edition: New appendices on random processes, information theory New coverage of image analysis - edge detection, linking, clustering, and segmentation Expanded coverage on image sensing and perception, including color spaces. Now summarizes the new MPEG coding standards: scalable video coding (SVC) and multiview video coding (MVC), in addition to coverage of H.264/AVC. Updated video processing material including new example on scalable video coding and more material on object- and region-based video coding. More on video coding for networks including practical network coding (PNC), highlighting the significant advantages of PNC for both video downloading and streaming. New coverage of super-resolution methods for image and video. Only R&D level tutorial that gives an integrated treatment of image and video processing - topics that are interconnected. New chapters on introductory random processes, information theory, and image enhancement and analysis Coverage and discussion of the latest standards in video coding: H.264/AVC and the new scalable video standard (SVC)

Security in Computing - Charles P. Pfleeger 2009

Health Communication - Claudia Parvanta 2018-08-29

Health Communication: Strategies and Skills for a New Era provides a practical process model for developing a health communication intervention. The book also explores exposure to media and how it shapes our conceptions of health and illness. Using a life stages and environments approach, the book touches on the patient role and how we 'hear' information from health care providers as well as guidance on how to be a thoughtful consumer of health information.

Transforming the Workforce for Children Birth Through Age 8 -

National Research Council 2015-07-23

Children are already learning at birth, and they develop and learn at a rapid pace in their early years. This provides a critical foundation for lifelong progress, and the adults who provide for the care and the education of young children bear a great responsibility for their health, development, and learning. Despite the fact that they share the same objective - to nurture young children and secure their future success - the various practitioners who contribute to the care and the education of children from birth through age 8 are not acknowledged as a workforce unified by the common knowledge and competencies needed to do their jobs well. Transforming the Workforce for Children Birth Through Age 8 explores the science of child development, particularly looking at implications for the professionals who work with children. This report examines the current capacities and practices of the workforce, the settings in which they work, the policies and infrastructure that set qualifications and provide professional learning, and the government agencies and other funders who support and oversee these systems. This book then makes recommendations to improve the quality of professional practice and the practice environment for care and education professionals. These detailed recommendations create a blueprint for action that builds on a unifying foundation of child development and early learning, shared knowledge and competencies for care and education professionals, and principles for effective professional learning. Young children thrive and learn best when they have secure, positive relationships with adults who are knowledgeable about how to support their development and learning and are responsive to their individual progress. Transforming the Workforce for Children Birth Through Age 8 offers guidance on system changes to improve the quality of professional practice, specific actions to improve professional learning systems and workforce development, and research to continue to build

the knowledge base in ways that will directly advance and inform future actions. The recommendations of this book provide an opportunity to improve the quality of the care and the education that children receive, and ultimately improve outcomes for children.

My Team - Larry Dierker 2006-07-11

Mantle or Mays? A-Rod or Jeter? Biggio or Morgan? Clemens, Maddux, and Randy Johnson -- or Pedro, Palmer, and Carlton? These are questions baseball fans can spend endless hours debating. Former All-Star pitcher and National League Manager of the Year Larry Dierker has his own opinions, and he shares them in *My Team*, his fascinating discussion of the greatest players he has seen in his four decades in the major leagues. Dierker selects twenty-five players for *My Team* and another twenty-five for the opposition, the Underdogs, or "Dogs." There are two players at each position, five starting pitchers, and four relievers. (When your starters are the likes of Roger Clemens, Greg Maddux, Bob Gibson, Tom Seaver, Nolan Ryan, and Juan Marichal, you don't worry about bullpen depth.) All are players that Dierker has played with or against or watched in his years as player, coach, manager, and commentator. Each athlete must have played at least ten years in the major leagues to qualify, and players are judged on their ten best seasons. Leadership skills and personality -- critical components of team chemistry -- are highly valued. So how is it possible to select two teams composed of outstanding ballplayers from the past forty years and not have room for Sandy Koufax, Reggie Jackson, Carl Yastrzemski, or Cal Ripken Jr.? Dierker explains his choices, analyzing each position carefully, always putting the team ahead of the individual player. He provides statistics to back up his selections, and often relates personal anecdotes about the players. (From his first All-Star Game in 1969, Dierker offers a wonderful anecdote about Hank Aaron, by then an All-Star veteran.) *My Team* may start more debates than it settles, but Dierker's insights, and his passion for the game, will enlighten and fascinate true baseball fans.

Adopting Circular Economy Current Practices and Future Perspectives - Idiano D'Adamo 2020-02-21

The development of a closed-loop cycle is a necessary condition so as to develop a circular economy model as an alternative to the linear model, in order to maintain the value of products and materials for as long as possible. For this motive, the definition of the value must be demonstrated for both the environment and the economy. The presence of these analyses should be associated with the social dimension and the human component. A strong cooperation between social and technical profiles is a new challenge for all researchers. End of life of products attract a lot of attention, and the final output could be the production of technologies suitable for managing this waste.

Imbalanced Learning - Haibo He 2013-06-07

The first book of its kind to review the current status and future direction of the exciting new branch of machine learning/data mining called imbalanced learning Imbalanced learning focuses on how an intelligent system can learn when it is provided with imbalanced data. Solving imbalanced learning problems is critical in numerous data-intensive networked systems, including surveillance, security, Internet, finance, biomedical, defense, and more. Due to the inherent complex characteristics of imbalanced data sets, learning from such data requires new understandings, principles, algorithms, and tools to transform vast amounts of raw data efficiently into information and knowledge representation. The first comprehensive look at this new branch of machine learning, this book offers a critical review of the problem of imbalanced learning, covering the state of the art in techniques, principles, and real-world applications. Featuring contributions from experts in both academia and industry, *Imbalanced Learning: Foundations, Algorithms, and Applications* provides chapter coverage on: Foundations of Imbalanced Learning Imbalanced Datasets: From Sampling to Classifiers Ensemble Methods for Class Imbalance Learning Class Imbalance Learning Methods for Support Vector Machines Class Imbalance and Active Learning Nonstationary Stream Data Learning with Imbalanced Class Distribution Assessment Metrics for Imbalanced Learning Imbalanced Learning: Foundations, Algorithms, and Applications will help scientists and engineers learn how to tackle the problem of learning from imbalanced datasets, and gain insight into current developments in the field as well as future research directions.

System and Measurements - Yong Sang 2020-01-20

This book provides the basic concepts and fundamental principles of dynamic systems including experimental methods, calibration, signal conditioning, data acquisition and processing as well as the results presentation. How to select suitable sensors to measure is also

introduced. It is an essential reference to students, lecturers, professionals and any interested lay readers in measurement technology.

Photo Forensics - Hany Farid 2019-02-26

The first comprehensive and detailed presentation of techniques for authenticating digital images. Photographs have been doctored since photography was invented. Dictators have erased people from photographs and from history. Politicians have manipulated photos for short-term political gain. Altering photographs in the predigital era required time-consuming darkroom work. Today, powerful and low-cost digital technology makes it relatively easy to alter digital images, and the resulting fakes are difficult to detect. The field of photo forensics—pioneered in Hany Farid's lab at Dartmouth College—restores some trust to photography. In this book, Farid describes techniques that can be used to authenticate photos. He provides the intuition and background as well as the mathematical and algorithmic details needed to understand, implement, and utilize a variety of photo forensic techniques. Farid traces the entire imaging pipeline. He begins with the physics and geometry of the interaction of light with the physical world, proceeds through the way light passes through a camera lens, the conversion of light to pixel values in the electronic sensor, the packaging of the pixel values into a digital image file, and the pixel-level artifacts introduced by photo-editing software. Modeling the path of light during image creation reveals physical, geometric, and statistical regularities that are disrupted during the creation of a fake. Various forensic techniques exploit these irregularities to detect traces of tampering. A chapter of case studies examines the authenticity of viral video and famously questionable photographs including "Golden Eagle Snatches Kid" and the Lee Harvey Oswald backyard photo.

Studying Engineering - Raymond B. Landis 2007

The Ultimate Guide To Choosing a Medical Specialty - Brian Freeman 2004-01-09

The first medical specialty selection guide written by residents for students! Provides an inside look at the issues surrounding medical specialty selection, blending first-hand knowledge with useful facts and statistics, such as salary information, employment data, and match statistics. Focuses on all the major specialties and features firsthand portrayals of each by current residents. Also includes a guide to personality characteristics that are predominate with practitioners of each specialty. "A terrific mixture of objective information as well as factual data make this book an easy, informative, and interesting read." -- Review from a 4th year Medical Student

Fundamentals of Multimedia - Ze-Nian Li 2014-04-09

This textbook introduces the "Fundamentals of Multimedia", addressing real issues commonly faced in the workplace. The essential concepts are explained in a practical way to enable students to apply their existing skills to address problems in multimedia. Fully revised and updated, this new edition now includes coverage of such topics as 3D TV, social networks, high-efficiency video compression and conferencing, wireless and mobile networks, and their attendant technologies. Features: presents an overview of the key concepts in multimedia, including color science; reviews lossless and lossy compression methods for image, video and audio data; examines the demands placed by multimedia communications on wired and wireless networks; discusses the impact of social media and cloud computing on information sharing and on multimedia content search and retrieval; includes study exercises at the end of each chapter; provides supplementary resources for both students and instructors at an associated website.

Books in Print Supplement - 2002

Digital Image Processing - Rafael C. Gonzalez 2002

Digital Image Processing has been the leading textbook in its field for more than 20 years. As was the case with the 1977 and 1987 editions by Gonzalez and Wintz, and the 1992 edition by Gonzalez and Woods, the present edition was prepared with students and instructors in mind. 771e material is timely, highly readable, and illustrated with numerous examples of practical significance. All mainstream areas of image processing are covered, including a totally revised introduction and discussion of image fundamentals, image enhancement in the spatial and frequency domains, restoration, color image processing, wavelets, image compression, morphology, segmentation, and image description. Coverage concludes with a discussion of the fundamentals of object recognition. Although the book is completely self-contained, a Companion Website (see inside front cover) provides additional support in the form of review material, answers to selected problems, laboratory

project suggestions. and a score of other features. A supplementary instructor's manual is available to instructors who have adopted the book for classroom use. New Features *New chapters on wavelets, image morphology, and color image

Real-Time Rendering - Tomas Akenine-Möller 2019-01-18

Thoroughly revised, this third edition focuses on modern techniques used to generate synthetic three-dimensional images in a fraction of a second. With the advent of programmable shaders, a wide variety of new algorithms have arisen and evolved over the past few years. This edition discusses current, practical rendering methods used in games and other applications. It also presents a solid theoretical framework and relevant mathematics for the field of interactive computer graphics, all in an approachable style. The authors have made the figures used in the book available for download for fair use.:Download Figures. Reviews Rendering has been a required reference for professional graphics practitioners for nearly a decade. This latest edition is as relevant as ever, covering topics from essential mathematical foundations to advanced techniques used by today's cutting edge games. -- Gabe Newell, President, Valve, May 2008 Rendering ... has been completely revised and revamped for its updated third edition, which focuses on modern techniques used to generate three-dimensional images in a fraction of the time old processes took. From practical rendering for games to math and details for better interactive applications, it's not to be missed. -- The Bookwatch, November 2008 You'll get brilliantly lucid explanations of concepts like vertex morphing and variance shadow mapping—as well as a new respect for the incredible craftsmanship that goes into today's PC games. -- Logan Decker, PC Gamer Magazine , February 2009

Strengthening Forensic Science in the United States - National Research Council 2009-07-29

Scores of talented and dedicated people serve the forensic science community, performing vitally important work. However, they are often constrained by lack of adequate resources, sound policies, and national support. It is clear that change and advancements, both systematic and scientific, are needed in a number of forensic science disciplines to ensure the reliability of work, establish enforceable standards, and promote best practices with consistent application. Strengthening Forensic Science in the United States: A Path Forward provides a detailed plan for addressing these needs and suggests the creation of a new government entity, the National Institute of Forensic Science, to establish and enforce standards within the forensic science community. The benefits of improving and regulating the forensic science disciplines are clear: assisting law enforcement officials, enhancing homeland security, and reducing the risk of wrongful conviction and exoneration. Strengthening Forensic Science in the United States gives a full account of what is needed to advance the forensic science disciplines, including upgrading of systems and organizational structures, better training, widespread adoption of uniform and enforceable best practices, and mandatory certification and accreditation programs. While this book provides an essential call-to-action for congress and policy makers, it also serves as a vital tool for law enforcement agencies, criminal prosecutors and attorneys, and forensic science educators.

Proceedings Second International Conference on Information Processing - L. M. Patnaik 2013-12-30

The proceedings features several key-note addresses in the areas of advanced information processing tools. This area has been recognized to be one of the key five technologies poised to shape the modern society in the next decade. It aptly focuses on the tools and techniques for the development of Information Systems. Emphasis is on pattern recognition and image processing, software engineering, mobile ad hoc networks, security aspects in computer networks, signal processing and hardware synthesis, optimization techniques, data mining and information processing.

Writing Research Papers - James D. Lester 2014-01-26

The definitive research paper guide, Writing Research Papers combines a traditional and practical approach to the research process with the latest information on electronic research and presentation. This market-leading text provides students with step-by-step guidance through the research writing process, from selecting and narrowing a topic to formatting the finished document. Writing Research Papers backs up its instruction with the most complete array of samples of any writing guide of this nature. The text continues its extremely thorough and accurate coverage of citation styles for a wide variety of disciplines. The fourteenth edition maintains Lester's successful approach while bringing new writing and documentation updates to assist the student researcher

in keeping pace with electronic sources.
Oxford Textbook of Clinical Nephrology - 2016

Teaching For Quality Learning At University - Biggs, John
2011-09-01

A bestselling book for higher education teachers and administrators interested in assuring effective teaching.

Tetraplegia and Paraplegia - Ida Bromley 2006-01-01

Extensively illustrated and easy to use, this practical resource offers clear guidelines and step-by-step sequences for moving and working with individuals with differing levels of paralysis. It serves as both an ideal student textbook and a valuable clinical manual for therapists who see tetraplegic and paraplegic patients. Clear, practical, concise chapters present important information in an easily understandable approach. Spiral-bound format enables the book to lay flat for easy reference in the clinical setting or classroom. Excellent coverage of wheelchairs and wheelchair management is included. All illustrations have been redrawn for increased clarity, to enhance the clinical usefulness of this resource. Audit and evidence-based practice is incorporated throughout. Discussion of patient empowerment is included. The chapter on hands has been expanded to provide more in-depth coverage of this important topic. New discussion of levers has been added to this edition. New chapter on aging offers insight and considerations for treating aging and elderly patients with spinal cord injury. Expanded section on equipment provides details on current and state-of-the-art equipment used in practice.

Pre-Incident Indicators of Terrorist Incidents - Brent L. Smith 2011-01
This is a print on demand edition of a hard to find publication. Explores whether sufficient data exists to examine the temporal and spatial relationships that existed in terrorist group planning, and if so, could patterns of preparatory conduct be identified? About one-half of the terrorists resided, planned, and prepared for terrorism relatively close to their eventual target. The terrorist groups existed for 1,205 days from the first planning meeting to the date of the actual/planned terrorist incident. The planning process for specific acts began 2-3 months prior to the terrorist incident. This study examined selected terrorist groups/incidents in the U.S. from 1980-2002. It provides for the potential to identify patterns of conduct that might lead to intervention prior to the commission of the actual terrorist incidents. Illustrations.

Digital Image Forensics - Husrev Taha Sencar 2012-08-01

Photographic imagery has come a long way from the pinhole cameras of the nineteenth century. Digital imagery, and its applications, develops in tandem with contemporary society's sophisticated literacy of this subtle medium. This book examines the ways in which digital images have become ever more ubiquitous as legal and medical evidence, just as they have become our primary source of news and have replaced paper-based financial documentation. Crucially, the contributions also analyze the very profound problems which have arisen alongside the digital image, issues of veracity and progeny that demand systematic and detailed response: It looks real, but is it? What camera captured it? Has it been doctored or subtly altered? Attempting to provide answers to these slippery issues, the book covers how digital images are created, processed and stored before moving on to set out the latest techniques for forensically examining images, and finally addressing practical issues such as courtroom admissibility. In an environment where even novice users can alter digital media, this authoritative publication will do much so stabilize public trust in these real, yet vastly flexible, images of the world around us.

Handbook of Digital Face Manipulation and Detection - Christian Rathgeb 2022-01-31

This open access book provides the first comprehensive collection of studies dealing with the hot topic of digital face manipulation such as DeepFakes, Face Morphing, or Reenactment. It combines the research fields of biometrics and media forensics including contributions from academia and industry. Appealing to a broad readership, introductory chapters provide a comprehensive overview of the topic, which address readers wishing to gain a brief overview of the state-of-the-art. Subsequent chapters, which delve deeper into various research challenges, are oriented towards advanced readers. Moreover, the book provides a good starting point for young researchers as well as a reference guide pointing at further literature. Hence, the primary readership is academic institutions and industry currently involved in digital face manipulation and detection. The book could easily be used as a recommended text for courses in image processing, machine learning, media forensics, biometrics, and the general security area.

Information Retrieval - William Hersh 2006-05-04

Coupled with the growth of the World Wide Web, the topic of health information retrieval has had a tremendous impact on consumer health information. With the aid of newly added questions and discussions at the end of each chapter, this Second Edition covers theory practical applications, evaluation, and research directions of all aspects of medical information retrieval systems.

Guide to Medical Image Analysis - Klaus D. Toennies 2017-03-29

This comprehensive guide provides a uniquely practical, application-focused introduction to medical image analysis. This fully updated new edition has been enhanced with material on the latest developments in the field, whilst retaining the original focus on segmentation, classification and registration. Topics and features: presents learning objectives, exercises and concluding remarks in each chapter; describes a range of common imaging techniques, reconstruction techniques and image artifacts, and discusses the archival and transfer of images; reviews an expanded selection of techniques for image enhancement, feature detection, feature generation, segmentation, registration, and validation; examines analysis methods in view of image-based guidance in the operating room (NEW); discusses the use of deep convolutional networks for segmentation and labeling tasks (NEW); includes appendices on Markov random field optimization, variational calculus and principal component analysis.

The Prefrontal Cortex - Joaquin M. Fuster 1997

Textbook of Diabetes - Richard I. G. Holt 2017-03-06

Now in its fifth edition, the Textbook of Diabetes has established itself as the modern, well-illustrated, international guide to diabetes. Sensibly organized and easy to navigate, with exceptional illustrations, the Textbook hosts an unrivalled blend of clinical and scientific content. Highly-experienced editors from across the globe assemble an outstanding set of international contributors who provide insight on new developments in diabetes care and information on the latest treatment modalities used around the world. The fifth edition features an array of brand new chapters, on topics including: Ischaemic Heart Disease Glucagon in Islet Regulation Microbiome and Diabetes Diabetes and Non-Alcoholic Fatty Liver Disease Diabetes and Cancer End of Life Care in Diabetes as well as a new section on Psychosocial aspects of diabetes. In addition, all existing chapters are fully revised with the very latest developments, including the most recent guidelines from the ADA, EASD, DUK and NICE. Includes free access to the Wiley Digital Edition providing search across the book, the full reference list with web links, illustrations and photographs, and post-publication updates Via the companion website, readers can access a host of additional online materials such as: 200 interactive MCQ's to allow readers to self-assess their clinical knowledge every figure from the book, available to download into presentations fully searchable chapter pdfs Once again, Textbook of Diabetes provides endocrinologists and diabetologists with a fresh, comprehensive and multi-media clinical resource to consult time and time again.

Ethics for the Information Age - Michael Jay Quinn 2006

Widely praised for its balanced treatment of computer ethics, Ethics for the Information Age offers a modern presentation of the moral controversies surrounding information technology. Topics such as privacy and intellectual property are explored through multiple ethical theories, encouraging readers to think critically about these issues and to make their own ethical decisions.

Experimental Stress Analysis for Materials and Structures - Alessandro Freddi 2015-03-19

This book summarizes the main methods of experimental stress analysis and examines their application to various states of stress of major technical interest, highlighting aspects not always covered in the classic literature. It is explained how experimental stress analysis assists in the verification and completion of analytical and numerical models, the development of phenomenological theories, the measurement and control of system parameters under operating conditions, and identification of causes of failure or malfunction. Cases addressed include measurement of the state of stress in models, measurement of actual loads on structures, verification of stress states in circumstances of complex numerical modeling, assessment of stress-related material damage, and reliability analysis of artifacts (e.g. prostheses) that interact with biological systems. The book will serve graduate students and professionals as a valuable tool for finding solutions when analytical solutions do not exist.

Paperbound Books in Print - 1981

Books in Print - 1979

Mathematica Cookbook - Sal Mangano 2010-04-02

Mathematica Cookbook helps you master the application's core principles by walking you through real-world problems. Ideal for browsing, this book includes recipes for working with numerics, data structures, algebraic equations, calculus, and statistics. You'll also venture into exotic territory with recipes for data visualization using 2D and 3D graphic tools, image processing, and music. Although

Mathematica 7 is a highly advanced computational platform, the recipes in this book make it accessible to everyone -- whether you're working on high school algebra, simple graphs, PhD-level computation, financial analysis, or advanced engineering models. Learn how to use Mathematica at a higher level with functional programming and pattern matching Delve into the rich library of functions for string and structured text manipulation Learn how to apply the tools to physics and engineering problems Draw on Mathematica's access to physics, chemistry, and biology data Get techniques for solving equations in computational finance Learn how to use Mathematica for sophisticated image processing Process music and audio as musical notes, analog waveforms, or digital sound samples