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*Mathematics and Computing* - Debdas Ghosh 2018-04-13

This book constitutes the proceedings of the 4th International Conference on Mathematics and Computing, ICMC 2018, held in Varanasi, India, in January 2018. The 29 papers presented in this volume were carefully reviewed and selected from 116 submissions. They are organized in topical sections on security and coding theory; computing; applied mathematics; pure mathematics.

Parallel Processing and Applied Mathematics - Roman Wyrzykowski 2014-05-05

This two-volume-set (LNCS 8384 and 8385) constitutes the refereed proceedings of the 10th International Conference of Parallel Processing and Applied Mathematics, PPAM 2013, held in Warsaw, Poland, in September 2013. The 143 revised full papers presented in both volumes were carefully reviewed and selected from numerous submissions. The papers cover important fields of parallel/distributed/cloud computing and applied mathematics, such as numerical algorithms and parallel scientific computing; parallel non-numerical algorithms; tools and environments for parallel/distributed/cloud computing; applications of parallel computing; applied mathematics, evolutionary computing and metaheuristics.

**Proceedings of the Eighth International Conference on Soft Computing and Pattern Recognition (SoCPaR 2016)** - Ajith Abraham

2017-08-17

This volume presents 70 carefully selected papers from a major joint event: the 8th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2016) and the 8th International Conference on Computational Aspects of Social Networks (CASoN 2016). SoCPaR-CASoN 2016, which was organized by the Machine Intelligence Research Labs (MIR Labs), USA and Vellore Institute of Technology (VIT), India and held at the VIT on December 19-21, 2016. It brings together researchers and practitioners from academia and industry to share their experiences and exchange new ideas on all interdisciplinary areas of soft computing and pattern recognition, as well as intelligent methods applied to social networks. This book is a valuable resource for practicing engineers/scientists and researchers working in the field of soft computing, pattern recognition and social networks.

**The Unity of the Sciences in Unification Thought Volume Two: Math, Physics, Chemistry** - Richard L. Lewis 2014

The implications of Unification Thought applied to modern science solving many of the problems that have arisen.

Conference proceedings. ICT for language learning - Pixel 2014

*TPACK: Breakthroughs in Research and Practice* - Management Association, Information Resources 2019-02-01

Educational technologies are becoming commonplace entities in classrooms as they provide more options and support for teachers and students. However, many teachers are finding these technologies difficult to use due to a lack of training and instruction on how to effectively apply them to the classroom. *TPACK: Breakthroughs in Research and Practice* is an authoritative reference source for the latest research on the integration of technological knowledge, pedagogical knowledge, and content knowledge in the contexts of K-12 education. Highlighting a range of pertinent topics such as pedagogical strategies, blended learning, and technology integration, this publication is an ideal resource for educators, instructional designers, administrators, academicians, and teacher education programs seeking current findings on the implementation of technology in instructional design.

**Photoshop CC: The Missing Manual** - Lesa Snider 2014-08-14

Annotation Photoshop CC is truly amazing, but it can also be overwhelming if you're just getting started. This book makes learning Photoshop as easy as possible by explaining things in a friendly, conversational style without technical jargon. After a thorough introduction to the program, you'll delve deep into Photoshop's secrets with expert tips and practical editing advice you can use every day.

*Graphics Interface 2014* - Paul G. Kry 2020-11-26

This book is the proceedings of the 40th annual Graphics Interface conference--the oldest continuously scheduled conference in the field. The book includes high-quality papers on recent advances in interactive systems, human computer interaction, and graphics from around the world. It covers the following topics: shading and rendering, geometric modeling and meshing, image-based rendering, image synthesis and realism, computer animation, real-time rendering, non-photorealistic rendering, interaction techniques, human interface devices, augmented reality, data and information visualization, mobile computing, haptic and tangible interfaces, and perception.

*A Biography of the Pixel* - Alvy Ray Smith 2021-08-03

The pixel as the organizing principle of all pictures, from cave paintings to Toy Story. The Great Digital Convergence of all media types into one

universal digital medium occurred, with little fanfare, at the recent turn of the millennium. The bit became the universal medium, and the pixel--a particular packaging of bits--conquered the world. Henceforward, nearly every picture in the world would be composed of pixels--cell phone pictures, app interfaces, Mars Rover transmissions, book illustrations, videogames. In *A Biography of the Pixel*, Pixar cofounder Alvy Ray Smith argues that the pixel is the organizing principle of most modern media, and he presents a few simple but profound ideas that unify the dazzling varieties of digital image making. Smith's story of the pixel's development begins with Fourier waves, proceeds through Turing machines, and ends with the first digital movies from Pixar, DreamWorks, and Blue Sky. Today, almost all the pictures we encounter are digital--mediated by the pixel and irretrievably separated from their media; museums and kindergartens are two of the last outposts of the analog. Smith explains, engagingly and accessibly, how pictures composed of invisible stuff become visible--that is, how digital pixels convert to analog display elements. Taking the special case of digital movies to represent all of Digital Light (his term for pictures constructed of pixels), and drawing on his decades of work in the field, Smith approaches his subject from multiple angles--art, technology, entertainment, business, and history. *A Biography of the Pixel* is essential reading for anyone who has watched a video on a cell phone, played a videogame, or seen a movie.

**Advancing the use of Eye-Tracking and Pupillometric Data in Complex Environments.** - Russell A. Cohen Hoffing 2022-04-27

*Intelligent Computing, Communication and Devices* - Lakhmi C. Jain 2014-08-25

In the history of mankind, three revolutions which impact the human life are tool-making revolution, agricultural revolution and industrial revolution. They have transformed not only the economy and civilization but the overall development of the human society. Probably, intelligence revolution is the next revolution, which the society will perceive in the next 10 years. ICCD-2014 covers all dimensions of intelligent sciences,

i.e. Intelligent Computing, Intelligent Communication and Intelligent Devices. This volume covers contributions from Intelligent Computing, areas such as Intelligent and Distributed Computing, Intelligent Grid & Cloud Computing, Internet of Things, Soft Computing and Engineering Applications, Data Mining and Knowledge discovery, Semantic and Web Technology, and Bio-Informatics. This volume also covers paper from Intelligent Device areas such as Embedded Systems, RFID, VLSI Design & Electronic Devices, Analog and Mixed-Signal IC Design and Testing, Solar Cells and Photonics, Nano Devices and Intelligent Robotics.

Environment, Energy and Sustainable Development - Wen-Pei Sung  
2013-12-17

Environment, Energy and Sustainable Development brings together 242 peer-reviewed papers presented at the 2013 International Conference on Frontiers of Energy and Environment Engineering, held in Xiamen, China, November 28-29, 2013. The main objective of this proceedings set is to take the environment-energy developments discussion a step further. Vo

Cryptography: Breakthroughs in Research and Practice - Management Association, Information Resources 2019-12-06

Advances in technology have provided numerous innovations that make people's daily lives easier and more convenient. However, as technology becomes more ubiquitous, corresponding risks also increase. The field of cryptography has become a solution to this ever-increasing problem. Applying strategic algorithms to cryptic issues can help save time and energy in solving the expanding problems within this field.

Cryptography: Breakthroughs in Research and Practice examines novel designs and recent developments in cryptographic security control procedures to improve the efficiency of existing security mechanisms that can help in securing sensors, devices, networks, communication, and data. Highlighting a range of topics such as cyber security, threat detection, and encryption, this publication is an ideal reference source for academicians, graduate students, engineers, IT specialists, software engineers, security analysts, industry professionals, and researchers interested in expanding their knowledge of current trends and

techniques within the cryptology field.

**Computational Modeling of Objects Presented in Images: Fundamentals, Methods, and Applications** - Yongjie Jessica Zhang  
2014-07-23

This book constitutes the refereed proceedings of the 4th International Conference on Computational Modeling of Objects Presented in Images, CompIMAGE 2014, held in Pittsburgh, PA, USA, in September 2014. The 29 revised full papers presented together with 10 short papers and 6 keynote talks were carefully reviewed and selected from 54 submissions. The papers cover the following topics: medical treatment, imaging and analysis; image registration, denoising and feature identification; image segmentation; shape analysis, meshing and graphs; medical image processing and simulations; image recognition, reconstruction and predictive modeling; image-based modeling and simulations; and computer vision and data-driven investigations.

**Mathematics for Machine Learning** - Marc Peter Deisenroth  
2020-04-23

The fundamental mathematical tools needed to understand machine learning include linear algebra, analytic geometry, matrix decompositions, vector calculus, optimization, probability and statistics. These topics are traditionally taught in disparate courses, making it hard for data science or computer science students, or professionals, to efficiently learn the mathematics. This self-contained textbook bridges the gap between mathematical and machine learning texts, introducing the mathematical concepts with a minimum of prerequisites. It uses these concepts to derive four central machine learning methods: linear regression, principal component analysis, Gaussian mixture models and support vector machines. For students and others with a mathematical background, these derivations provide a starting point to machine learning texts. For those learning the mathematics for the first time, the methods help build intuition and practical experience with applying mathematical concepts. Every chapter includes worked examples and exercises to test understanding. Programming tutorials are offered on the book's web site.

### **XIII Mediterranean Conference on Medical and Biological**

**Engineering and Computing 2013** - Laura M. Roa Romero 2013-10-01

The general theme of MEDICON 2013 is "Research and Development of Technology for Sustainable Healthcare". This decade is being characterized by the appearance and use of emergent technologies under development. This situation has produced a tremendous impact on Medicine and Biology from which it is expected an unparalleled evolution in these disciplines towards novel concept and practices. The consequence will be a significant improvement in health care and well-fare, i.e. the shift from a reactive medicine to a preventive medicine. This shift implies that the citizen will play an important role in the healthcare delivery process, what requires a comprehensive and personalized assistance. In this context, society will meet emerging media, incorporated to all objects, capable of providing a seamless, adaptive, anticipatory, unobtrusive and pervasive assistance. The challenge will be to remove current barriers related to the lack of knowledge required to produce new opportunities for all the society, while new paradigms are created for this inclusive society to be socially and economically sustainable, and respectful with the environment. In this way, these proceedings focus on the convergence of biomedical engineering topics ranging from formalized theory through experimental science and technological development to practical clinical applications.

*Digital-Forensics and Watermarking* - Yun-Qing Shi 2015-06-24

This book constitutes the thoroughly refereed post-conference proceedings of the 13th International Workshop on Digital-Forensics and Watermarking, IWDW 2014, held in Taipei, Taiwan, during October 2014. The 32 full and 14 poster papers, presented together with 1 keynote speech, were carefully reviewed and selected from 79 submissions. The papers are organized in topical sections on forensics; watermarking; reversible data hiding; visual cryptography; and steganography and steganalysis.

**The Digital Incunabula: rock • paper • pixels** - Patrick Aievoli 2015-10-28

"The Digital Incunabula is Patrick Aievoli's personal sonnet through

media, interaction and communication design. He carefully crafts each evolutionary step into ripples that are supported by his own storied professional and academic experiences. It's full of facts, terms and historical information which makes it perfect for anyone looking to flat out learn "--James Pannafino, Professor, Millersville University & Interaction Design

*Master Guide SSC CGL Combined Graduate Level Pre Exam Tier 1 2022* - Arihant Experts 2021-01-12

1. Master Guide SSC CGL Pre Exam (Tier 1) is prepared according Online exam pattern 2. The guide is divided into 4 major sections 3. Each section is accompanied with 5 Section Tests 4. Separate section has been allotted to current affairs 5. Previous Years' Solved Papers, Mock tests and Crack Shots for thorough Practice The Staff Selection Commission or (SSC) has been one of the most desirable organizations for Government exam in India. Aspirants appearing for the exams are required to have proper guidance and preparation to get into the different departments of Government. The revised edition of "SSC CGL Pre Examination Tier I Online Pattern" serves as a Master guide that is carefully designed to give Chapterwise coverage of previous Years' Question. The book divides the entire syllabus of Tier 1 into 4 sections - General Intelligence & reasoning, General Awareness, Quantitative Aptitude, and English Language giving the complete theory of as per the prescribe syllabus. Latest Current Affairs are given to provide complete summary of the current events & happening around the world. More than 5000 MCQs given for the quick revision. Besides, theories each section is accompanied by 5 section tests to master the strategy. Lastly solved papers, Crack Shots and Mock Tests are given to know the paper pattern, question types along with thorough practice. TOC Current Affairs, Solved Papers (2020-2016), General Intelligence and Reasoning, General Awareness, Quantitative Aptitude, English Language, Crack Shots (2), Mock Tests (1-3)

Conference Proceedings. The Future of Education - Pixel 2015-07-01

*Breast Imaging* - Hiroshi Fujita 2014-06-23

This book constitutes the refereed proceedings of the 12th International Workshop on Breast Imaging, IWDM 2014, held in Gifu City, Japan, in June/July 2014. The 24 revised full papers and 73 revised poster papers presented together with 6 invited talks were carefully reviewed and selected from 122 submissions. The papers are organized in topical sections on screening outcomes, ultrasound, breast density, imaging physics, CAD, tomosynthesis and ICT and image processing.

**Brain-Inspired Computing** - Lucio Grandinetti 2014-10-16

This book constitutes the thoroughly refereed conference proceedings of the International Workshop on Brain-inspired Computing, BrainComp 2013, held in Cetraro, Italy, in July 2013. The 16 revised full papers were carefully reviewed and selected from numerous submissions and cover topics such as brain structure and function as a neuroscience perspective, computational models and brain-inspired computing, HPC and visualization for human brain simulations.

Improving Information Security Practices through Computational Intelligence - Awad, Wasan Shaker 2015-08-26

The recent explosion in complex global networking architectures has spurred a concomitant rise in the need for robust information security. Further, as computing power increases exponentially with every passing year, so do the number of proposed cryptographic schemata for improving and ensuring the encryption integrity of cutting-edge infosec protocols. *Improving Information Security Practices through Computational Intelligence* presents an overview of the latest and greatest research in the field, touching on such topics as cryptology, stream ciphers, and intrusion detection, and providing new insights to an audience of students, teachers, and entry-level researchers working in computational intelligence, information security, and security engineering.

**Computer Vision - ACCV 2014 Workshops** - C.V. Jawahar 2015-04-10

The three-volume set, consisting of LNCS 9008, 9009, and 9010, contains carefully reviewed and selected papers presented at 15 workshops held in conjunction with the 12th Asian Conference on Computer Vision, ACCV 2014, in Singapore, in November 2014. The 153 full papers

presented were selected from numerous submissions. LNCS 9008 contains the papers selected for the Workshop on Human Gait and Action Analysis in the Wild, the Second International Workshop on Big Data in 3D Computer Vision, the Workshop on Deep Learning on Visual Data, the Workshop on Scene Understanding for Autonomous Systems, and the Workshop on Robust Local Descriptors for Computer Vision. LNCS 9009 contains the papers selected for the Workshop on Emerging Topics on Image Restoration and Enhancement, the First International Workshop on Robust Reading, the Second Workshop on User-Centred Computer Vision, the International Workshop on Video Segmentation in Computer Vision, the Workshop: My Car Has Eyes: Intelligent Vehicle with Vision Technology, the Third Workshop on E-Heritage, and the Workshop on Computer Vision for Affective Computing. LNCS 9010 contains the papers selected for the Workshop on Feature and Similarity for Computer Vision, the Third International Workshop on Intelligent Mobile and Egocentric Vision, and the Workshop on Human Identification for Surveillance.

*Progress in Industrial Mathematics at ECMI 2014* - Giovanni Russo 2017-09-04

This book presents a collection of papers emphasizing applications of mathematical models and methods to real-world problems of relevance for industry, life science, environment, finance and so on. The biannual Conference of ECMI (the European Consortium of Mathematics in Industry) held in 2014 focused on various aspects of industrial and applied mathematics. The five main topics addressed at the conference were mathematical models in life science, material science and semiconductors, mathematical methods in the environment, design automation and industrial applications, and computational finance. Several other topics have been treated, such as, among others, optimization and inverse problems, education, numerical methods for stiff pdes, model reduction, imaging processing, multi physics simulation, mathematical models in textile industry. The conference, which brought together applied mathematicians and experts from industry, provided a unique opportunity to exchange ideas, problems and methodologies,

bridging the gap between mathematics and industry and contributing to the advancement of science and technology. The conference has included a presentation of EU-Maths-In (European Network of Mathematics for Industry and Innovation), a recent joint initiative of ECMI and EMS. The proceedings from this conference represent a snapshot of the current activity in industrial mathematics in Europe, and are highly relevant to anybody interested in the latest applications of mathematics to industrial problems.

Word 2013 ELearning Kit For Dummies - Lois Lowe 2014-04-28

Whether you've used other versions of this popular program or never processed a single word, this guide will get you going with Word 2013. *Conference proceedings. ICT for language learning. 9th edition* - Pixel 2016

*Putting the "Why" Back into Bone "Archytecture"* - Phil Salmon 2017-07-27

A large literature exists on trabecular and cortical bone morphology. The engineering performance of bone, implied from its 3d architecture, is often the endpoint of bone biology experiments, being clinically relevant to bone fracture. How and why does bone travel along its complex spatio-temporal trajectory to acquire its architecture? The question "why" can have two meanings. The first, "teleological - why is an architecture advantageous?" - is the domain of substantial biomechanical research to date. The second, "etiologial - how did an architecture come about?" - has received far less attention. This Frontiers Bone Research Topic invited contributions addressing this "etiologial why" - what mechanisms can coordinate the activity of bone forming and resorbing cells to produce the observed complex and efficient bone architectures? One mechanism is proposed - chaotic nonlinear pattern formation (NPF) which underlies - in a unifying way - natural structures as disparate as trabecular bone, swarms of birds flying or shoaling fish, island formation, fluid turbulence and others. At the heart of NPF is the fact that simple rules operating between interacting elements multiplied and repeated many times, lead to complex and structured patterns. This paradigm of

growth and form leads to a profound link between bone regulation and its architecture: in bone "the architecture is the regulation". The former is the emergent consequence of the latter. Whatever mechanism does determine bone's developing architecture has to operate at the level of individual sites of formation and resorption and coupling between the two. This has implications as to how we understand the effect on bone of agents such as gene products or drugs. It may be for instance that the "tuning" of coupling between formation and resorption might be as important as the achievement of enhanced bone volume. The ten articles that were contributed to this Topic were just what we hoped for - a snapshot of leading edge bone biology research which addresses the question of how bone gets its shape. We hope that you find these papers thought-provoking, and that they might stimulate new ideas in the research into bone architecture, growth and adaptation, and how to preserve healthy bone from gestation and childhood until old age.

Indigenous Pathways, Transitions and Participation in Higher Education - Jack Frawley 2017-05-31

This book is open access under a CC BY 4.0 license. This book brings together contributions by researchers, scholars, policy-makers, practitioners, professionals and citizens who have an interest in or experience of Indigenous pathways and transitions into higher education. University is not for everyone, but a university should be for everyone. To a certain extent, the choice not to participate in higher education should be respected given that there are other avenues and reasons to participate in education and employment that are culturally, socially and/or economically important for society. Those who choose to pursue higher education should do so knowing that there are multiple pathways into higher education and, once there, appropriate support is provided for a successful transition. The book outlines the issues of social inclusion and equity in higher education, and the contributions draw on real-world experiences to reflect the different approaches and strategies currently being adopted. Focusing on research, program design, program evaluation, policy initiatives and experiential narrative accounts, the book critically discusses issues concerning widening

participation.

*Emerging Technologies for Education* - Tien-Chi Huang 2017-12-15

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

*Advances in Civil and Industrial Engineering IV* - Guang Fan Li

2014-07-04

Selected, peer reviewed papers from the 4th International Conference on Civil Engineering, Architecture and Building Materials (CEABM 2014), May 24-25, 2014, Haikou, China

*Teaching English to Young Learners* - Janice Bland 2015-09-24

Aimed at student teachers, educators and practitioners, *Teaching English Language to Young Learners* outlines and explains the crucial issues, themes and scenarios relating to this area of teaching. Each chapter by a leading international scholar offers a thorough introduction to a central theme of English as a foreign language (EFL) with preteens, with clear presentation of the theoretical background and detailed references for further reading, providing access to the most recent scholarship. Exploring the essential issues critically and in-depth, including the disadvantages as well as advantages of Teaching English as a Foreign Language (TEFL) with young learners, topics include: - task-based learning in the primary school; - storytelling; - drama; - technology; - vocabulary development; - intercultural understanding; - Content and Language Integrated Learning (CLIL) scenarios; - assessment. Innovative and rapidly emerging topics are covered, such as immersion teaching, picturebooks in the EFL classroom and English with pre-primary children.

*The Practice of Light* - Sean Cubitt 2014-09-05

An account of Western visual technologies since the Renaissance traces a

history of the increasing control of light's intrinsic excess. Light is the condition of all vision, and the visual media are our most important explorations of this condition. The history of visual technologies reveals a centuries-long project aimed at controlling light. In this book, Sean Cubitt traces a genealogy of the dominant visual media of the twenty-first century—digital video, film, and photography—through a history of materials and practices that begins with the inventions of intaglio printing and oil painting. Attending to the specificities of inks and pigments, cathode ray tubes, color film, lenses, screens, and chips, Cubitt argues that we have moved from a hierarchical visual culture focused on semantic values to a more democratic but value-free numerical commodity. Cubitt begins with the invisibility of black, then builds from line to surface to volume and space. He describes Rembrandt's attempts to achieve pure black by tricking the viewer and the rise of geometry as a governing principle in visual technology, seen in Dürer, Hogarth, and Disney, among others. He finds the origins of central features of digital imaging in nineteenth-century printmaking; examines the clash between the physics and psychology of color; explores the representation of space in shadows, layers, and projection; discusses modes of temporal order in still photography, cinema, television, and digital video; and considers the implications of a political aesthetics of visual technology.

**Handbook of Research on Maximizing Cognitive Learning through Knowledge Visualization** - Ursyn, Anna 2015-02-28

The representation of abstract data and ideas can be a difficult and tedious task to handle when learning new concepts; however, the advances of emerging technology have allowed for new methods of representing such conceptual data. The *Handbook of Research on Maximizing Cognitive Learning through Knowledge Visualization* focuses on the use of visualization technologies to assist in the process of better comprehending scientific concepts, data, and applications. Highlighting the utilization of visual power and the roles of sensory perceptions, computer graphics, animation, and digital storytelling, this book is an essential reference source for instructors, engineers, programmers, and

software developers interested in the exchange of information through the visual depiction of data.

*Biomedical Engineering and Environmental Engineering* - David Chan  
2015-05-06

This conference series is a forum for enhancing mutual understanding between Biomedical Engineering and Environmental Engineering field. This proceeding provides contributions from many experts representing industry and academic establishments worldwide. The researchers are from different countries and professional. The conference brought

**Conference Proceeding. New Perspectives in Scienze Education** - Pixel 2016-03-04

**Conference proceedings. New perspectives in science education** - Pixel 2014

*No bullshit guide to math and physics* - Ivan Savov 2014-08-07

Often calculus and mechanics are taught as separate subjects. It shouldn't be like that. Learning calculus without mechanics is incredibly

boring. Learning mechanics without calculus is missing the point. This textbook integrates both subjects and highlights the profound connections between them. This is the deal. Give me 350 pages of your attention, and I'll teach you everything you need to know about functions, limits, derivatives, integrals, vectors, forces, and accelerations. This book is the only math book you'll need for the first semester of undergraduate studies in science. With concise, jargon-free lessons on topics in math and physics, each section covers one concept at the level required for a first-year university course. Anyone can pick up this book and become proficient in calculus and mechanics, regardless of their mathematical background.

*Neuromorphic Engineering Systems and Applications* - Chiara Bartolozzi  
2021-12-01

*Information Technology* - Yi Wan 2015-09-07

These proceedings of the symposium ISIT 2014 aim to be a platform for international exchange of the state-of-the-art research and practice in information technology. The contributions cover a wide variety of topics, ranging from theoretical and analytical studies to various applications.