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Fundamentals of Mathematical Statistics
 Access All Areas
 STRUCTURED COMPUTER ORGANIZATION
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 Transnational, European, and National Labour Relations
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 Python for Scientists
 Modeling Life
 Elements of Information Theory
 Speech & Language Processing
 Bad Bug Book
 Chebyshev and Fourier Spectral Methods
 March's Advanced Organic Chemistry
 Applied Multivariate Statistical Analysis (Classic Version)

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Fundamentals of Mathematical Statistics Letts and Lonsdale

Mathematical Statistics with Applications in R, Second Edition, offers a modern calculus-based theoretical introduction to mathematical statistics and applications. The book covers many modern statistical computational and simulation concepts that are not covered in other texts, such as the Jackknife, bootstrap methods, the EM algorithms, and Markov chain Monte Carlo (MCMC) methods such as the Metropolis algorithm, Metropolis-Hastings algorithm and the Gibbs sampler. By combining the discussion on the theory of statistics with a wealth of real-world applications, the book helps students to approach statistical problem solving in a logical manner. This book provides a step-by-step procedure to solve real problems, making the topic more accessible. It includes goodness of fit methods to identify the probability distribution that characterizes the probabilistic behavior or a given set of data. Exercises as well as practical, real-world chapter projects are included, and each chapter has an optional section on using Minitab, SPSS and SAS commands. The text also boasts a wide array of coverage of ANOVA, nonparametric, MCMC, Bayesian and empirical methods; solutions to selected problems; data sets; and an image bank for students. Advanced undergraduate and graduate students taking a one or two semester mathematical statistics course will find this book extremely useful in their studies. Step-by-step procedure to solve real problems, making the topic

more accessible Exercises blend theory and modern applications Practical, real-world chapter projects Provides an optional section in each chapter on using Minitab, SPSS and SAS commands Wide array of coverage of ANOVA, Nonparametric, MCMC, Bayesian and empirical methods

Access All Areas Springer

This textbook is aimed at newcomers to nonlinear dynamics and chaos, especially students taking a first course in the subject. The presentation stresses analytical methods, concrete examples, and geometric intuition. The theory is developed systematically, starting with first-order differential equations and their bifurcations, followed by phase plane analysis, limit cycles and their bifurcations, and culminating with the Lorenz equations, chaos, iterated maps, period doubling, renormalization, fractals, and strange attractors.

STRUCTURED COMPUTER ORGANIZATION OUP Oxford

This book tells the story of how China's leaders, from Mao to Xi, have sacrificed ethics to promote either macroeconomic performance or microeconomic efficiency. This story includes Mao's collectivization of land, the Great Leap Forward, the Great Cultural Revolution, Deng's opening China to international trade, Tiananmen Square, the freeing of prices, food and medicine scandals, the 2015 surge and collapse of the Chinese stock market, the falling of China's foreign reserves, and so on. In 2008, China's leaders correctly identified the best strategy as a "consumption-driven growth strategy" because the current world is suffering from a glut of savings. However, for that strategy to work, the Chinese need to be able to trust China's economy and leaders. In the absence of trust, people will make decisions based on extremely short time frames which will hurt China's long-

run potential and continue to generate a series of speculative bubbles. In the absence of trust, wealthy Chinese will continue to move their assets abroad, putting tremendous downward pressure on the Chinese yuan. The Chinese will develop a long-run perspective and invest in China only when they can trust China's future. In today's world, trust is necessary. Trust is built on ethics.

Essential Immunology Springer

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.

Transnational, European, and National Labour Relations SIAM

Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Knowledge updating is a never-ending process and so should be the revision of an effective textbook. The book originally written fifty years ago has, during the intervening period, been revised and reprinted several times. The authors have, however, been thinking, for the last few years that the book needed not only a thorough revision but rather a substantial rewriting. They now take great pleasure in presenting to the readers the twelfth, thoroughly revised and enlarged, Golden Jubilee edition of the book. The subject-matter in the entire book has been re-written in the light of numerous criticisms and suggestions received from the users of the earlier editions in India and abroad. The basis of this revision has been the emergence of new literature on the subject, the constructive feedback from students and teaching fraternity, as well as those changes that have been made in the syllabi and/or the pattern of examination papers of numerous universities. Some prominent additions are given below: 1. Variance of Degenerate Random Variable 2. Approximate Expression for Expectation and Variance 3. Lyapounov's Inequality 4. Holder's Inequality 5. Minkowski's Inequality 6. Double Expectation Rule or Double-E Rule and many others

Nonlinear Dynamics and Chaos Cambridge University Press

"The text is suitable for a typical introductory algebra course, and was developed to be used flexibly. While the breadth of topics may go beyond what an instructor would cover, the modular approach and the richness of content ensures that the book meets the needs of a variety of programs."--Page 1.

Introduction to Statistical Quality Control A K PETERS

Provides an introduction to numerical methods for students in engineering. It uses Python 3, an easy-to-use, high-level programming language.

Compactness and Contradiction Springer

Scientific Python is taught from scratch in this book via copious, downloadable, useful and adaptable code snippets. Everything the working scientist needs to know is covered, quickly providing researchers and research students with the skills to start using Python effectively.

Ethics, Efficiency and Macroeconomics in China Cambridge University Press

The Bad Bug Book 2nd Edition, released in 2012, provides current information about the major known agents that cause foodborne illness. Each chapter in this book is about a pathogen—a bacterium, virus, or parasite—or a natural toxin that can contaminate food and cause illness. The book contains scientific and technical information about the major pathogens that cause these kinds of illnesses. A separate “consumer box” in each chapter provides non-technical information, in everyday language. The boxes describe plainly what can make you sick and, more important, how to prevent it. The information provided in this handbook is abbreviated and general in nature, and is intended for practical use. It is not intended to be a comprehensive scientific or clinical reference. The Bad Bug Book is published by the Center for Food Safety and Applied Nutrition (CFSAN) of the Food and Drug Administration (FDA), U.S. Department of Health and Human Services.

Mathematics and Climate Kluwer Law International B.V.

The Eighth Doctor faces new perils in this bumper collection of classic comic adventures. This volume features eight amazing stories: "The Fallen," "Unnatural Born Killers," "The Road to Hell," "The Company of Thieves," "The Glorious Dead," "The Autonomy Bug," "Happy Deathday," and "TV Action." Also included are two bonus stories from the early days of "Doctor Who Weekly," "Throwback: The Soul of a Cyberman" and "Ship of Fools," telling the origins of Kroton the Cyberman. And, a special six-page, behind-the-scenes feature where writers Scott Gray, Alan Barnes, and Adrian Salmon reveal background information on the stories' origins, alongside never-before-seen sketches and character designs from Salmon and fellow artists

Martin Geraghty and Roger Langridge.

Algebra and Trigonometry Courier Corporation

This anthology discusses the converging operational issues of air base defense and counterinsurgency. It explores the diverse challenges associated with defending air assets and joint personnel in a counterinsurgency environment. The authors are primarily Air Force officers from security forces, intelligence, and the office of special investigations, but works are included from a US Air Force pilot and a Canadian air force officer. The authors examine lessons from Vietnam, Iraq, Afghanistan, and other conflicts as they relate to securing air bases and sustaining air operations in a high-threat counterinsurgency environment. The essays review the capabilities, doctrine, tactics, and training needed in base defense operations and recommend ways in which to build a strong, synchronized ground defense partnership with joint and combined forces. The authors offer recommendations on the development of combat leaders with the depth of knowledge, tactical and operational skill sets, and counterinsurgency mind set necessary to be effective in the modern asymmetric battlefield.

All of Statistics Military Bookshop

This book employs an innovative approach to explore the topic of flexicurity and related changes in the working world, the importance of which for the overall economic and social development is gradually being recognised. It focuses on the changing nature of work and its impact on EU law and national labour and social security laws. Though the transformation of regulatory and institutional frameworks of labour relations follows different patterns in different EU Member States, it is nevertheless a common phenomenon that offers an excellent opportunity for mutual learning experiences and comparing notes on best practices. Taking these ideas as a starting point, the book presents a collection of research on various aspects and implications of changing labour relations in the EU Member States. The opening chapters address the internal market dimension of the transformation of employment relations by investigating how social dumping, integration of migrant workers, and cross-border mergers influence national labour policies and laws. The book further analyses linguistic and terminological challenges in the field of labour law in the EU's multi-lingual legal environment. Subsequent chapters cover various theoretical and practical issues, such as the impact of chain-liability regulatory models on the legal situation of workers in subcontracting networks, and modern work arrangements in the collaborative or 'gig' economy. Other chapters are dedicated to issues of jurisdiction and law applicable to individual employment contracts, as well as alternative resolution mechanisms in labour disputes. The next section offers fresh insights on and a critical overview of the well-known Danish and Dutch models of flexicurity, often cited as role models for reforms of labour markets in other EU Member States. Three individual chapters investigate specific aspects of flexicurity in Croatia, in terms of individual dismissals, life-long learning and the impact of non-standard employment on future pension entitlements. One paper explores temporary agency work in Germany as an important instrument of flexicurity, while another discusses various forms of work used in Slovenia in the context of flexibilization of work relations. Many challenges still lie ahead, and the primary aim of this book is to provide a solid basis for informed future discussions.

OCR Chemistry CRC Press

"Once solely the domain of engineers, quality control has become a vital business operation used to increase productivity and secure competitive advantage. Introduction to Statistical Quality Control offers a detailed presentation of the modern statistical methods for quality control and improvement. Thorough coverage of statistical process control (SPC) demonstrates the efficacy of statistically-oriented experiments in the context of process characterization, optimization, and acceptance sampling, while examination of the implementation process provides context to real-world applications. Emphasis on Six Sigma DMAIC (Define, Measure, Analyze, Improve and Control) provides a strategic problem-solving framework that can be applied across a variety of disciplines. Adopting a balanced approach to traditional and modern methods, this text includes coverage of SQC techniques in both industrial and non-manufacturing settings, providing fundamental knowledge to students of engineering, statistics, business, and management sciences. A strong pedagogical toolset, including multiple practice problems, real-world data sets and examples, provides students with a solid base of conceptual and practical knowledge."--

Numerical Algorithms Createspace Independent Publishing Platform

The Mathematics of Chip-firing is a solid introduction and overview of the growing field of chip-firing. It offers an appreciation for the richness and diversity of the subject. Chip-firing refers to a discrete dynamical system — a commodity is exchanged between sites of a network according to very simple local rules. Although governed by local rules, the long-term global behavior of the system reveals fascinating properties. The Fundamental properties of chip-firing are covered from a variety of perspectives. This gives the reader both a broad context of the field and concrete entry points from different backgrounds. Broken into two sections, the first examines the fundamentals of chip-firing, while the second half presents more general frameworks for chip-firing. Instructors and students will discover that this book provides a comprehensive background to approaching original sources. Features: Provides a broad introduction for researchers interested in the subject of chip-firing. The text includes historical and current perspectives. Exercises included at the end of each chapter. About the Author: Caroline J. Klivans received a BA degree in mathematics from Cornell University and a PhD in applied mathematics from MIT. Currently, she is an Associate Professor in the Division of Applied Mathematics at Brown University. She is also an Associate Director of ICERM (Institute for Computational and Experimental Research in Mathematics). Before coming to Brown she held positions at MSRI, Cornell and the University of Chicago. Her research is in algebraic, geometric and topological combinatorics.

Task Design In Mathematics Education Elsevier

The Sixth Edition of a classic in organic chemistry continues its tradition of excellence. Now in its sixth edition, March's Advanced Organic Chemistry remains the gold standard in organic chemistry. Throughout its six editions, students and chemists from around the world have relied on it as an essential resource for planning and executing synthetic reactions. The Sixth Edition brings the text completely current with the most recent organic reactions. In addition, the references have been updated to enable readers to find the latest primary and review literature with ease. New features include: More than 25,000 references to the literature to facilitate further research. Revised mechanisms, where required, that explain concepts in clear modern terms. Revisions and updates to each chapter to bring them all fully up to date with the latest reactions and discoveries. A revised Appendix B to facilitate correlating chapter sections with synthetic transformations.

Reason in Context Cambridge University Press

Introduces machine learning and its algorithmic paradigms, explaining the principles behind automated learning approaches and the considerations underlying their usage.

Op Amps for Everyone Elsevier

THIS BOOK IS AVAILABLE AS OPEN ACCESS BOOK ON SPRINGERLINK This open access book is the product of ICMI Study 22 Task Design in Mathematics Education. The study offers a state-of-the-art summary of relevant research and goes beyond that to develop new insights and new areas of knowledge and study about task design. The authors represent a wide range of countries and cultures and are leading researchers, teachers and designers. In particular, the authors develop explicit understandings of the opportunities and difficulties involved in designing and implementing tasks and of the interfaces between the teaching, researching and designing roles - recognising that these might be undertaken by the same person or by completely separate teams. Tasks generate the activity through which learners meet mathematical concepts, ideas, strategies and learn to use and develop mathematical thinking and modes of enquiry. Teaching includes the selection, modification, design, sequencing, installation, observation and evaluation of tasks. The book illustrates how task design is core to effective teaching, whether the task is a complex, extended, investigation or a small part of a lesson; whether it is part of a curriculum system, such as a textbook, or promotes free standing activity; whether the task comes from published source or is devised by the teacher or the student.

Transfer Pricing Developments Around the World 2017 John Wiley & Sons

Interested in the Genetic Algorithm? Simulated Annealing? Ant Colony Optimization? Essentials of Metaheuristics covers these and other metaheuristics algorithms, and is intended for undergraduate students, programmers, and non-experts. The book covers a wide range of algorithms, representations, selection and modification operators, and related topics, and includes 71 figures and 135 algorithms great and small. Algorithms include: Gradient Ascent techniques, Hill-Climbing variants, Simulated Annealing, Tabu Search variants, Iterated Local Search, Evolution Strategies, the Genetic Algorithm, the Steady-State Genetic Algorithm, Differential Evolution, Particle Swarm Optimization, Genetic Programming variants, One- and Two-Population Competitive Coevolution, N-Population Cooperative Coevolution, Implicit Fitness Sharing, Deterministic Crowding, NSGA-II, SPEA2, GRASP, Ant Colony Optimization variants, Guided Local Search, LEM, PBIL, UMDA, cGA, BOA, SAMUEL, ZCS, XCS, and XCSF.

An introduction to the theory of numbers Pearson

This book develops the mathematical tools essential for students in the life sciences to describe interacting systems and predict their behavior. From predator-prey populations in an ecosystem, to hormone regulation within the body, the natural world abounds in dynamical systems that affect us profoundly. Complex feedback relations and counter-intuitive responses are common in nature; this book develops the quantitative skills needed to explore these interactions. Differential equations are the natural mathematical tool for quantifying change, and are the driving force throughout this book. The use of Euler's method makes nonlinear examples tractable and accessible to a broad spectrum of early-stage undergraduates, thus providing a practical alternative to the procedural approach of a traditional Calculus curriculum. Tools are developed within numerous, relevant examples, with an emphasis on the construction, evaluation, and interpretation of mathematical models throughout. Encountering these concepts in context, students learn not only quantitative techniques, but how to bridge between biological and mathematical ways of thinking. Examples range broadly, exploring the dynamics of neurons and the immune system, through to population dynamics and the Google PageRank algorithm. Each scenario relies only on an interest in the natural world; no biological expertise is assumed of student or instructor. Building on a single prerequisite of Precalculus, the book suits a two-quarter sequence for first or second year undergraduates, and meets the mathematical requirements of medical school entry. The later material provides opportunities for more advanced students in both mathematics and life sciences to revisit theoretical knowledge in a rich, real-world framework. In all cases, the focus is clear: how does the math help us understand the science?

Biostatistical Analysis Letts & Lonsdale

** PRE-ORDER LENNY HENRY'S NEW AUTOBIOGRAPHY RISING TO THE SURFACE NOW **Sir Lenny Henry rang up the Office for National Statistics to confirm something he'd been thinking about for a long time. They told him that only 29.5% of the United Kingdom's population is made up of white, heterosexual, able-bodied men; so, he wonders, why do they still make up the vast majority of people we see in our media? Joining forces with the former Chair of the Royal Television Society's Diversity Committee Marcus Ryder, he draws on decades of experience to reveal why recent efforts to diversify media have been thus far ineffective, and why they are simply not enough. With wit, humour and unflinching gravitas they analyse the flaws of current diversity initiatives, point out the structural and financial imbalances working against the cause, and provide clear solutions to get the media industry back on track. Access All Areas is an urgent, actionable manifesto that will dramatically shift the debate around diversity and the media.