

Fundamentals Of Le Data Networks

This book presents a contemporary view of the role of information quality in information fusion and decision making, and provides a formal foundation and the implementation strategies required for dealing with insufficient information quality in building fusion systems for decision making. Information fusion is the process of gathering, processing, and combining large amounts of information from multiple and diverse sources, including physical sensors to human intelligence reports and social media. That data and information may be unreliable, of low fidelity, insufficient resolution, contradictory, fake and/or redundant. Sources may provide unverified reports obtained from other sources resulting in correlations and biases. The success of the fusion processing depends on how well knowledge produced by the processing chain represents reality, which in turn depends on how adequate data are, how good and adequate are the models used, and how accurate, appropriate or applicable prior and contextual knowledge is. By offering contributions by leading experts, this book provides an unparalleled understanding of the problem of information quality in information fusion and decision-making for researchers and professionals in the field.

A comprehensive, tutorial-style introduction to the algorithms necessary for tomographic imaging.

Science and engineering students depend heavily on concepts of mathematical modeling. In an age where almost everything is done on a computer, author Clive Dym believes that students need to understand and "own" the underlying mathematics that computers are doing on their behalf. His goal for Principles of Mathematical Modeling, Second Edition, is to engage the student reader in developing a foundational understanding of the subject that will serve them well into their careers. The first half of the book begins with a clearly defined set of modeling principles, and then introduces a set of foundational tools including dimensional analysis, scaling techniques, and approximation and validation techniques. The second half demonstrates the latest applications for these tools to a broad variety of subjects, including exponential growth and decay in fields ranging from biology to economics, traffic flow, free and forced vibration of mechanical and other systems, and optimization problems in biology, structures, and social decision making. Prospective students should have already completed courses in elementary algebra, trigonometry, and first-year calculus and have some familiarity with differential equations and basic physics. Serves as an introductory text on the development and application of mathematical models Focuses on techniques of particular interest to engineers, scientists, and others who model continuous systems Offers more than 360 problems, providing ample opportunities for practice Covers a wide range of interdisciplinary topics--from engineering to economics to the sciences Uses straightforward language and explanations that make modeling easy to understand and apply New to this Edition: A more systematic approach to mathematical modeling, outlining ten specific principles Expanded and reorganized chapters that flow in an increasing level of complexity Several new problems and updated applications Expanded figure captions that provide more information Improved accessibility and flexibility for teaching

Fundamentals of Nursing, 2e highlights the core themes of nursing, including nurse, person, health and environment, covering the fundamental concepts, skills and standards of practice. Research and evidence-based practice issues are highlighted to help introductory nursing students prepare for delivering care for culturally diverse populations across a continuum of settings. With up-to-date coverage of the Registered Nurse Standards of Practice (2016) and key pedagogical features such as our unique "Spotlight on Critical Thinking" questions, this text challenges students to assess their own nursing practice and apply the concepts to real-life clinical settings. Fundamentals of Nursing presents in-depth material in a clear, concise manner using language that is easy to read and has good coverage of topics such as rural and remote nursing and Aboriginal and Torres Strait Islander health. This text is complemented by the bestselling Tollefson, Clinical Psychomotor Skills: Assessment Tools for Nursing, which covers skills and procedures. A value pack of these two texts is available. Premium online teaching and learning tools are available on the MindTap platform.

Fundamentals of Geographic Information Systems

Fundamentals of Spatial Data Quality

The Essentials of Financial Analysis

Fundamentals of 21st Century Neuroscience

Fundamentals of Information Technology

Issue 19428 April 7, 2014

Multimedia technologies are becoming more sophisticated, enabling the Internet to accommodate a rapidly growing audience with a full range of services and efficient delivery methods. Although the Internet now puts communication, education, commerce and socialization at our finger tips, its rapid growth has raised some weighty security concerns with respect to multimedia content. The owners of this robust data enormous challenges in safeguarding their intellectual property, while still exploiting the Internet as an important resource for commerce. Data Hiding Fundamentals and Applications focuses on the theory and state-of-the-art applications of content security and data hiding in digital multimedia. One of the pillars of content security solutions is the imperceptible insertion of information into multimedia data for security purposes; the idea is that this inserted information will allow detection of unauthorized usage. * Provides a theoretical framework for data hiding, in a signal processing context. * Realistic applications in secure, multimedia delivery. * Compression robust data hiding. * Data hiding for proof of ownership–WATERMARKING. * Data hiding algorithms for image and video watermarking.

Fundamentals of Natural Gas Processing explores the natural gas industry from the wellhead to the marketplace. It compiles information from the open literature, meeting proceedings, and experts to accurately depict the state of gas processing technology today and highlight technologies that could become important in the future. This book cov

The third edition of Fundamentals of Information Technology is a "must have" book not only for BCA and MBA students, but also for all those who want to strengthen their knowledge of computers. The additional chapter on MS World, MS Excel and other components of the package. This book is packed with expert advice from eminent IT professionals, in-depth analyses and practical examples. It presents a detailed functioning of hardware components besides covering the software concepts. A broad overview of Computer architecture, Data representation in the computer, Operating systems, Database management systems,

Programming languages, etc., has also been included. An additional chapter on Mobile Computing and other state-of-the-art innovations in the IT world have been incorporated. Not only that, the latest Internet technologies have also been covered in detail.One should use this book to acquire computer literacy in terms of how data is represented in a computer, how hardware devices are integrated to get the desired results, how the computer can be networked for interchanging data and establishing communication.Each chapter is followed by a number of review questions.

Fundamentals of Spatial Data QualityJohn Wiley & Sons

Daily Graphic

Principles of Computerized Tomographic Imaging

Fundamentals of Machine Learning for Predictive Data Analytics, second edition

Data Hiding Fundamentals and Applications

Principles and Practice

Fundamentals of Irrigation and On-farm Water Management: Volume 1

Written by leading global experts, including pioneers in the field, the four-volume set on Hyperspectral Remote Sensing of Vegetation, Second Edition, reviews existing state-of-the-art knowledge, highlights advances made in different areas, and provides guidance for the appropriate use of hyperspectral data in the study and management of agricultural crops and natural vegetation. Volume I, Fundamentals, Sensor Systems, Spectral Libraries, and Data Mining for Vegetation introduces the fundamentals of hyperspectral or imaging spectroscopy data, including hyperspectral data processes, sensor systems, spectral libraries, and data mining and analysis, covering both the strengths and limitations of these topics. This book also presents and discusses hyperspectral narrowband data acquired in numerous unique spectral bands in the entire length of the spectrum from various ground-based, airborne, and spaceborne platforms. The concluding chapter provides readers with useful guidance on the highlights and essence of Volume I through the editors' perspective. Key Features of Volume I: Provides the fundamentals of hyperspectral remote sensing used in agricultural crops and vegetation studies. Discusses the latest advances in hyperspectral remote sensing of ecosystems and croplands. Develops online hyperspectral libraries, proximal sensing and phenotyping for understanding, modeling, mapping, and monitoring crop and vegetation traits. Implements reflectance spectroscopy of soils and vegetation. Enumerates hyperspectral data mining and data processing methods, approaches, and machine learning algorithms. Explores methods and approaches for data mining and overcoming data redundancy. Highlights the advanced methods for hyperspectral data processing steps by developing or implementing appropriate algorithms and coding the same for processing on a cloud computing platform like the Google Earth Engine. Integrates hyperspectral with other data, such as the LiDAR data, in the study of vegetation. Includes best global expertise on hyperspectral remote sensing of agriculture, crop water use, plant species detection, crop productivity and water productivity mapping, and modeling.

The Definitive Online Exploratory Analysis of Massive Spatial and Spatiotemporal DatabasesSince the publication of the first edition of Geographic Data Mining and Knowledge Discovery, new techniques for geographic data warehousing (GDW), spatial data mining, and geovisualization (GVIS) have been developed. In addition, there has been

The second edition of a comprehensive introduction to machine learning approaches used in predictive data analytics, covering both theory and practice. Machine learning is often used to build predictive models by extracting patterns from large datasets. These models are used in predictive data analytics applications including price prediction, risk assessment, predicting customer behavior, and document classification. This introductory textbook offers a detailed and focused treatment of the most important machine learning approaches used in predictive data analytics, covering both theoretical concepts and practical applications. Technical and mathematical material is augmented with explanatory worked examples, and case studies illustrate the application of these models in the broader business context. This second edition covers recent developments in machine learning, especially in a new chapter on deep learning, and two new chapters that go beyond predictive analytics to cover unsupervised learning and reinforcement learning.

This volume represents a valuable collective contribution to the research and development of database systems. It contains papers in a variety of topics such as data models, distributed databases, multimedia databases, concurrency control, hypermedia and document processing, user interface, query processing and database applications. Contents: Introduction to SQL/X (W Kim)An Object-Oriented Approach to Security Policies and their Access Controls for Database Management (D K Hsiao)The ESSE Project: An Overview (R Zicari et al.)The Remote-Exchange Approach to Semantic Heterogeneity in Federated Database Systems (D McLeod)A Linear Model of Distributed Query Execution Strategies (M E Orlowska & Y-C Zhang)Multimedia Data Handling in a Knowledge Representation System (E Bertino et al.)Implementation and Evaluation of a New Approach to Storage Management for Persistent Data — Towards Virtual-Memory Databases (G-Y Bai & A Makinouchi)Hyperbase System: A Structured Architecture (R Sacks-Davis et al.)JA Hypermedia Document System Based on Relational Database (S Futamura et al.)Cooperative Query Answering in CoBase (Q-M Chen & W Chu)The ADKMS Knowledge Acquisition System (E Bertino et al.)Constraints for Query Optimization in Deductive Databases (J Harland & K Ramamohanarao)The Object-Oriented Database Management — A Tutorial on Its Fundamentals (D K Hsiao)and other papers Readership: Computer scientists.

A Primer on Making Informative and Compelling Figures

Import, Tidy, Transform, Visualize, and Model Data

Principles of Mathematical Modeling

Fundamentals of Social Work Research

Fundamentals of Computer Science

Inside Bluetooth Low Energy

A comprehensive resource for understanding the issues involved in collecting, measuring and managing data in the financial services industry.

This book explains the concept of spatial data quality, a key theory for minimizing the risks of data misuse in a specific decision-making context. Drawing together chapters written by authors who are specialists in their particular field, it provides both the data producer and the data user perspectives on how to evaluate the quality of vector or raster data which are both produced and used. It also covers the key concepts in this field, such as: how to describe the quality of vector or raster data; how to enhance this quality; how to evaluate and document it, using methods such as metadata; how to communicate it to users; and how to relate it with the decision-making process. Also included is a Foreword written by Professor Michael F. Goodchild.

The analysis of variance is presented as an exploratory component of data analysis, while retaining the customary least squares fitting methods. Balanced data layouts are used to reveal key ideas and techniques for exploration. The approach emphasizes both the individual observations and the separate parts that the analysis produces. Most chapters include exercises and the appendices give selected percentage points of the Gaussian, *t*, *F* chi-squared and studentized range distributions.

Spatial technologies like GIS, CAD, and spatial DBMS have proved their applicability and usability in almost every sector of urban development. Urban Planning Systems, Public Participation Systems, and others have been continuously developed and improved contributing to better decision making, communicating ideas between different actors as well as

Forecasting: principles and practice

Biostatistics

Content Security in Digital Media

Essentials of Bio-Statistics: An overview with the help of Software

Fundamentals, Sensor Systems, Spectral Libraries, and Data Mining for Vegetation

Principles of Distributed Database Systems

Bluetooth Low Energy (LE) is one of the latest enhancement to Bluetooth technology and, as the name suggests, it is aimed at ultra low power devices, such as heart rate monitors, thermometers, and laboratory sensors. Due to very low power consumption, devices compliant with this standard can operate for months or even years on coin cell batteries without the need for recharging. This cutting-edge book helps you understand the whats, whys, and hows of Bluetooth LE. It includes a broad view of the technology, identifies the various building blocks and explains how they come together. The book explains the architecture of Bluetooth LE stack and the functionality provided by each of the layers. You find expert guidance in setting up your own system in a quick and efficient manner with inexpensive, easily available hardware and just a couple of PCs running Linux. Additionally, this practical volume features exercises and sample programs to help you get a first-hand feel for how the technology works.

Chemical principles are fundamental to the Earth sciences, and geoscience students increasingly require a firm grasp of basic chemistry to succeed in their studies. The enlarged third edition of this highly regarded textbook introduces the student to such ' geo-relevant ' chemistry, presented in the same lucid and accessible style as earlier editions, but the new edition has been strengthened in its coverage of environmental geoscience and incorporates a new chapter introducing isotope geochemistry. The book comprises three broad sections. The first (Chapters 1 – 4) deals with the basic physical chemistry of geological processes. The second (Chapters 5 – 8) introduces the wave-mechanical view of the atom and explains the various types of chemical bonding that give Earth materials their diverse and distinctive properties. The final chapters (9 – 11) survey the geologically relevant elements and isotopes, and explain their formation and their abundances in the cosmos and the Earth. The book concludes with an extensive glossary of terms; appendices cover basic maths, explain basic solution chemistry, and list the chemical elements and the symbols, units and constants used in the book.

Effective visualization of knowledge and the detailed manner in which it is used for both the novice and experienced user of the powder diffraction method. Useful for any scientific or engineering background, where precise structural information is required. Comprehensively describes the state-of-the-art in structure determination from powder diffraction data both theoretically and practically using multiple examples of varying complexity. Pays particular attention to the utilization of Internet resources, especially the well-tested and freely available computer codes designed for processing of powder diffraction data. Effective visualization is the best way to communicate information from the increasingly large and complex datasets in the natural and social sciences. But with the increasing power of visualization software today, scientists, engineers, and business analysts often have to navigate a bewildering array of visualization choices and options. This practical book takes you through many commonly encountered visualization problems, and it provides guidelines on how to turn large datasets into clear and compelling figures. What visualization type is best for the story you want to tell? How do you make informative figures that are visually pleasing? Author Claus O. Wilke teaches you the elements most critical to successful data visualization. Explore the basic concepts of color as a tool to highlight, distinguish, or represent a value Understand the importance of redundant coding to ensure you provide key information in multiple ways Use the book ' s visualizations directory, a graphical guide to commonly used types of data visualizations Get extensive examples of good and bad figures Learn how to use figures in a document or report and how employ them effectively to tell a compelling story

Fundamentals of the Theory of Computation: Principles and Practice

Future Databases '92

Fundamentals of Operating Systems

Fundamentals of Queueing Theory

Algorithms, Worked Examples, and Case Studies

Agriculture is one of the few industries that has been creating resources conti- ouously from nature. Sustainability of this industry is a crucial issue at now-a-days. Agricultural technologies are important to feed the growing world population. Agricultural engineering has been applying scienti?c principles for the optimal use of natural resources in agricultural production for the bene?t of humankind. The role of agricultural engineering is increasing in the coming days at the forthcoming challenges of producing more food with less water coupled with climate uncertainty. I am happy to know that a book entitled "Fundamentals of Irrigation and On-farm Water Management", written by Engr. Dr. M. H. Ali, is going to be p- lished by Springer. The book is designed to cover the major ?elds of agricultural and environmental engineering such as weather, plant, soil, water, and basics of on-farm water management. The book will be quite useful for the students of agricultural engineering. Students of other related branches of engineering s- ences, and engineers working in the ?eld and at research institutes will also be benif?ted. The book may serve as a text book for the students and as a practical hand-book for the practitioners and researchers in the ?eld of irrigation and on-farm water management. Utilization of the recent literature in the area and citation of relevant journals / reports have added a special value to this book. Considering the topics covered, engineers, scientists, practitioners, and educators will ?nd this book as a valuable resource.

A Revised and Updated Edition of a Bestselling GIS Text Fundamentals of Crime Mapping, Second Edition walks readers through the research, theories, and history of geographic information systems used in law enforcement. Practical, comprehensive, and highly accessible, the revised and updated Second Edition of this bestselling text explains the day-to-day application of crime analysis for mapping. The text is packed with relevant real-world scenarios that contextualize key concepts and reflect actual crime patterns, trends, and series. Students will develop the skills to analyze and synthesize information and transition classroom-based knowledge to careers in the fast-growing field of law enforcement. Special topics discussed include current basic mapping terminology, crime trends in rural and urban areas, the major ecological theories of crime, geographic profiling, and empirical research using crime mapping tools. The Second Edition incorporates all-new material, including new chapters on the basics of cartography and police methodologies and their impact on crime mapping, as well as all-new exercises using ArcGIS 10. Fundamentals of Crime Mapping, Second Edition helps to equip any practitioner of crime mapping and its related fields with the tools and understanding necessary to meet the challenges of the day.

A little over 2ve years have passed since the ?rst edition of this book appeared in print. Seems like an instant but also eternally, especially considering numerous developments in the hardware and software that have made it from the laboratory test beds into the real world of powder diffraction. This prompted a revision, which had to be beyond cosmetic limits. The book was, and remains focused on standard laboratory powder diffractometry. It is still meant to be used as a text for teaching students about the capabilities and limitations of the powder diffraction method. We also hope that it goes beyond a simple text, and therefore, is useful as a reference to practitioners of the technique. The original book had seven long chapters that may have made its use as a text - convenient. So the second edition is broken down into 25 shorter chapters. The ?rst ?teen are concerned with the fundamentals of powder diffraction, which makes it much more logical, considering a typical 16-week long semester. The last ten ch- ters are concerned with practical examples of structure solution and re?nement, which were preserved from the ?rst edition and expanded by another example – R solving the crystal structure of Tylenel .

This innovative textbook presents the key foundational concepts for a one-semester undergraduate course in the theory of computation. It offers the most accessible and motivational course material available for undergraduate computer theory classes. Directed at undergraduates who may have difficulty understanding the relevance of the course to their future careers, the text helps make them more comfortable with the techniques required for the deeper study of computer science. The text motivates students by clarifying complex theory with many examples, exercises and detailed proofs. * This book is shorter and more accessible than the books now being used in core computer theory courses. * Theory of computing is a standard, required course in all computer science departments.

A Compendium

Fundamentals of Natural Gas Processing

Fundamentals of Data Visualization

Understanding Bioinformatics: Genes to Proteins

UDMS 2007 Annual

Geographic Data Mining and Knowledge Discovery

"This book introduces you to R, RStudio, and the tidyverse, a collection of R packages designed to work together to make data science fast, fluent, and fun. Suitable for readers with no previous programming experience."

"This book is a compilation of readings representing the basis for the practice of pediatric audiology. It contains 47 selected articles, each considered critical to understanding the fundamental principles in the field. Divided into five sections, the book covers the development of audition in infants, background information for current practice, test techniques and technology, and hearing loss in special populations. The readings in the book provide a foundation of knowledge for anyone in the field of pediatric audiology. . . . It's easier than you think to understand the financial reports you face every day . . . If your job focus is on managing employees and overseeing corporate affairs, financial analysis may sound like a foreign language to you. But, in today's competitive business environment, it is crucial that managers and business executives have a firm grasp of financial analysis. The Essentials of Financial Analysis simplifies an often difficult-to-understand topic so stakeholders ranging from employees to executives to investors can workings. The Essentials of Financial Analysis delivers practical, in-depth coverage on the key components of financial reporting, budgeting, and analysis to help you better relate to the numbers behind the business issues you face every day. By the time you turn the final page of this book, you will be able to command confident discussions on performance, investment, and other financial situations with members of your finance team and senior management. This hands-on book helps you make better business decisions analysis, as well as. Contribute to an organization's success and guide others companywide to make better financial decisions Reduce cost of capital and hurdle rates by selecting the financial markets, intermediaries, and instruments that work best for your company's financing needs Increase shareholder value by pursuing growth through capital investment, new products, mergers and acquisitions, joint ventures, and other strategies Your career success and the prosperity of your company depends on your ability to understand the principles. With The Essentials of Financial Analysis, you can go inside the numbers and get a clear picture of where your company has been, where it is going, and how you can help it get there.

Bioinformatics is an integrative field of computer science, genetics, genomics, proteomics, and statistics, which has undoubtedly revolutionized the study of biology and medicine in past decades. It mainly assists in modeling, predicting and interpreting large multidimensional biological data by utilizing advanced computational methods. Despite its enormous potential, bioinformatics is not widely integrated into the academic curriculum as basic life science students and researchers are still not equipped with the necessary tool. Hence, the primary purpose of our book is to supplement this unmet need by providing an easily accessible platform for students and researchers starting their career in life sciences. This book aims to avoid sophisticated computational algorithms and programming. Instead, it mostly focuses on simple DIY analysis and interpretation of biological data with personal computers. Our belief is that once the beginners acquire these basic skillsets, they will be able to handle most of the bioinformatics tools for their research experimental outcomes. Unlike other bioinformatics books which are mostly theoretical, this book provides practical examples for the readers on state-of-the-art open source tools to solve biological problems. Flow charts of experiments, graphical illustrations, and mock data are included for quick reference. Volume 1 is therefore an ideal companion for students and early stage professionals wishing to master this blooming field.

Fundamentals of Powder Diffraction and Structural Characterization of Materials

Elgar Encyclopedia of Law and Data Science

Fundations of Pediatric Audiology

Urban and Regional Data Management

Fundamentals of Powder Diffraction and Structural Characterization of Materials, Second Edition

Fundamentals of Well-log Interpretation: The interpretation of logging data

This book intends to provide an overview of biostatistics concepts and methodology through the use of statistical software. It helps clinicians, health care and biomedical professionals who need to have basic knowledge of biostatistics as they come across clinical data related to patient, drug and dosage requirement, treatment modalities in day to day life and they are required to take clinical and health care decisions based on the data. This book covers basic concepts involved in the field of Biostatistics such as descriptive statistics, inferential statistics, correlation and regression along with the advanced concepts such as factor analysis, cluster analysis, discriminant analysis and survival analysis. Each topic is explained with the help of R statistical package (open source package). One important note that the book will not discuss about the formulas and equations involved in the statistical concepts and the author assumes that the readers have basic understanding of excel as the sample dataset is used in the book are mostly excel based datasets and also have some clinical background.

Praise for the Third Edition "This is one of the best books available. Its excellent organizational structure allows quick reference to specific models and its clear presentation . . . solidifies the understanding of the concepts being presented." —IEE Transactions on Operations Engineering Thoroughly revised and expanded to reflect the latest developments in the field, Fundamentals of Queueing Theory, Fourth Edition continues to present the basic statistical principles that are necessary to analyze the probabilistic nature of queues. Rather than presenting a narrow focus on the subject, this update illustrates the wide-reaching, fundamental concepts in queueing theory and its applications to diverse areas such as computer science, engineering, business, and operations research. This update takes a numerical approach to understanding and making probable estimations relating to queues, with a comprehensive outline of simple and more advanced queueing models. Newly featured topics of the Fourth Edition include: Retrial queues Approximations for queueing networks Numerical inversion of transforms Determining the appropriate number of servers to balance quality and cost of service Each chapter provides a self-contained presentation of key concepts and formulae, allowing readers to work with each section independently, while a summary table at the end of the book outlines the types of queues that have been discussed and their queues. In addition, two new appendices have been added, discussing transforms and generating functions as well as the fundamentals of differential and difference equations. New examples are now included along with problems that incorporate QtsPlus software, which is freely available via the book's related Web site. With its accessible style and wealth of real-world examples, Fundamentals of Queueing Theory, Fourth Edition is an ideal book for courses on queueing theory at the upper-undergraduate and graduate levels. It is also a valuable resource for researchers and practitioners who analyze congestion in the fields of telecommunications, transportation, aviation, and management science.

Forecasting Is required in many situations. Stocking an inventory may require forecasts of demand months in advance. Telecommunication routing requires traffic forecasts a few minutes ahead. Whatever the circumstances or time horizons involved, forecasting is an important aid in effective and efficient planning. This textbook provides a comprehensive introduction to forecasting methods and presents enough information about each method for readers to use them sensibly.

This Encyclopedia brings together jurists, computer scientists, and data analysts to map the emerging field of data science and law for the first time, uncovering the challenges, opportunities, and fault lines that arise as these groups are increasingly thrown together by expanding attempts to regulate and adapt to a data-driven world. It explains the concepts and tools at the crossroads of the many disciplines involved in data science and law, bridging scientific and applied domains. Entries span algorithmic fairness, consent, data protection, ethics, healthcare, machine learning, patents, surveillance, transparency and vulnerability.

Information Quality in Information Fusion and Decision Making

Fundamentals of Exploratory Analysis of Variance

Fundamentals of Nursing: Australia & NZ Edition 2e

R for Data Science

Fundamentals of Crime Mapping

Chemical Fundamentals of Geology and Environmental Geoscience

Conceived and written by a geologist for geologists, Fundamentals of Well-Log Interpretation is a considerably revised and updated translation of the French edition. Part 1 dealt with the acquisition of logging data and when it appeared, one reviewer wrote: Serra has written a major reference work which is unusually well-organized, well-illustrated, and information-rich...If volume 2 is as thorough and exacting in detail as volume 1, it will do much toward furthering geologists' knowledge of well logging." (AAPG Bulletin). The fundamental objective of this second volume is to show that wireline log data constitute a remarkable source of geological information of the utmost importance for geologists, but also for reservoir engineers, geophysicists and petrophysicists. Too often, by nature of their training, geologists do not realize that wireline log data, which are physical data, hold in fact a tremendous variety of geological information covering practically all branches of geology. They are reluctant to use these data because often they are not familiar with them and do not know how to interpret wireline logs.

Fundamentals of Advanced Omics Technologies: From Genes to Metabolites covers the fundamental aspects of the new instrumental and methodological developments in omics technologies, including those related to genomics, transcriptomics, epigenetics, proteomics and metabolomics, as well as other omics approaches such as glycomics, peptidomics and foodomics. The principal applications are presented in the following complementary volume. The chapters discuss in detail omics technologies, DNA microarray analysis, next-generation sequencing technologies, genome-wide analysis of methylation and histone modifications, emerging nanotechniques in proteomics, imaging mass spectrometry in proteomics, and advances in high-resolution NMR-based metabolomics, as well as MS-based non-targeted metabolomics and metabolome analysis by CE-MS, global glycomics analyses, foodomics, and high resolution analytical tools for quantitative peptidomics. Key aspects related to chemometrics, bioinformatics, data treatment, data integration and systems biology, deep-sequencing data analysis, statistical approaches for the analysis of microarray data, the integration of transcriptome and metabolome data and computational approaches for visualization and integration of omics data are also covered. Covers the latest advances in instrumentation, experimental design, sample preparation, and data analysis Provides thorough explanations and descriptions of specific omics technologies Describes advanced tools and methodologies for data pretreatment, storage, curation and analysis, as well as data integration

Designed to help students develop skills in evaluating research and conducting studies, this brief version of Rafael J. Engel and Russell K. Schutt's popular, The Practice of Research in Social Work, makes principles of evidence-based practice come alive through illustrations of actual social work research. With integration of the CSWE Competencies, the text addresses issues and concerns common to the discipline and encourages students to address diversity and ethics when planning and evaluating research studies. The Second Edition includes a focus on qualitative research, a new chapter on research ethics, new sections on mixed methods research and community-based participatory research, and more.

The fourth edition of this classic textbook provides major updates. This edition has completely new chapters on Big Data Platforms (distributed storage systems, MapReduce, Spark, data stream processing, graph analytics) and on NoSQL, NewSQL and polystore systems. It also includes an updated web data management chapter that includes RDF and semantic web discussion, an integrated database integration chapter focusing both on schema integration and querying over these systems. The peer-to-peer computing chapter has been updated with a discussion of blockchain. The chapters that describe classical distributed and parallel database technology have all been updated. The new edition covers the breadth and depth of the field from a modern viewpoint. Graduate students, as well as senior undergraduate students studying computer science and other related fields will use this book as a primary textbook. Researchers working in computer science will also find this textbook useful. This textbook has a companion web site that includes background information on relational database fundamentals, query processing, transaction management, and computer networks for those who might need this background. The web site also includes all the figures and presentation slides as well as solutions to exercises (restricted to instructors).

Handbook of Financial Data and Risk Information II

