

Data Analytics Made Accessible: 2018 Edition

In order to carry out data analytics, we need powerful and flexible computing software. However the software available for data analytics is often proprietary and can be expensive. This book reviews Apache tools, which are open source and easy to use. After providing an overview of the background of data analytics, covering the different types of analysis and the basics of using Hadoop as a tool, it focuses on different Hadoop ecosystem tools, like Apache Flume, Apache Spark, Apache Storm, Apache Hive, R, and Python, which can be used for different types of analysis. It then examines the different machine learning techniques that are useful for data analytics, and how to visualize data with different graphs and charts. Presenting data analytics from a practice-oriented viewpoint, the book discusses useful tools and approaches for data analytics, supported by concrete code examples. The book is a valuable reference resource for graduate students and professionals in related fields, and is also of interest to general readers with an understanding of data analytics.

Get complete instructions for manipulating, processing, cleaning, and crunching datasets in Python. Updated for Python 3.6, the second edition of this hands-on guide is packed with practical case studies that show you how to solve a broad set of data analysis problems effectively. You'll learn the latest versions of pandas, NumPy, IPython, and Jupyter in the process. Written by Wes McKinney, the creator of the Python pandas project, this book is a practical, modern introduction to data science tools in Python. It's ideal for analysts new to Python and for Python programmers new to data science and scientific computing. Data files and related material are available on GitHub. Use the IPython shell and Jupyter notebook for exploratory computing Learn basic and advanced features in NumPy (Numerical Python) Get started with data analysis tools in the pandas library Use flexible tools to load, clean, transform, merge, and reshape data Create informative visualizations with matplotlib Apply the pandas groupby facility to slice, dice, and summarize datasets Analyze and manipulate regular and irregular time series data Learn how to solve real-world data analysis problems with thorough, detailed examples

The entertainment industry has long been dominated by legendary screenwriter William Goldman's "Nobody-Knows-Anything" mantra, which argues that success is the result of managerial intuition and instinct. This book builds the case that combining such intuition with data analytics and rigorous scholarly knowledge provides a source of sustainable competitive advantage – the same recipe for success that is behind the rise of firms such as Netflix and Spotify, but has also fueled Disney's recent success. Unlocking a large repertoire of scientific studies by business scholars and entertainment economists, the authors identify essential factors, mechanisms, and methods that help a new entertainment product succeed. The book thus offers a timely alternative to "Nobody-Knows" decision-making in the digital era: while coupling a good idea with smart data analytics and entertainment theory cannot guarantee a hit, it systematically and substantially increases the probability of success in the entertainment industry. Entertainment Science is poised to inspire fresh new thinking among managers, students of entertainment, and scholars alike. Thorsten Hennig-Thurau and Mark B. Houston – two of our finest scholars in the area of entertainment marketing – have produced a definitive research-based compendium that cuts across various branches of the arts to explain the phenomena that provide consumption experiences to capture the hearts and minds of audiences. Morris B. Holbrook, W. T. Dillard Professor Emeritus of Marketing, Columbia University Entertainment Science is a must-read for everyone working in the entertainment industry today, where the impact of digital and the use of big data can't be ignored anymore. Hennig-Thurau and Houston are the scientific frontrunners of knowledge that the industry urgently needs. Michael Kölmel, media entrepreneur and Honorary Professor of Media Economics at University of Leipzig Entertainment Science's winning combination of creativity, theory, and data analytics offers managers in the creative industries and beyond a novel, compelling, and comprehensive approach to support their decision-making. This ground-breaking book marks the dawn of a new Golden Age of fruitful conversation between entertainment scholars, managers, and artists. Allègre Hadida, Associate Professor in Strategy, University of Cambridge

Turn unstructured data into valuable business insight Unstructured Data Analytics provides an accessible, non-technical introduction to the analysis of unstructured data. Written by global experts in the analytics space, this book presents unstructured data analysis (UDA) concepts in a practical way, highlighting the broad scope of applications across industries, companies, and business functions. The discussion covers key aspects of UDA implementation, beginning with an explanation of the data and the information it provides, then moving into a holistic framework for implementation. Case studies show how real-world companies are leveraging UDA in security and customer management, and provide clear examples of both traditional business applications and newer, more innovative practices. Roughly 80 percent of today's data is unstructured in the form of emails, chats, social media, audio, and video. These data assets contain a wealth of valuable information that can be used to great advantage, but accessing that data in a meaningful way remains a challenge for many companies. This book provides the baseline knowledge and the practical understanding companies need to put this data to work. Supported by research with several industry leaders and packed with frontline stories from leading organizations such as Google, Amazon, Spotify, LinkedIn, Pfizer Manulife, AXA, Monster Worldwide, Under Armour, the Houston Rockets, DELL, IBM, and SAS Institute, this book provide a framework for building and implementing a successful UDA center of excellence. You will learn: How to increase Customer Acquisition and Customer Retention with UDA The Power of UDA for Fraud Detection and Prevention The Power of UDA in Human Capital Management & Human Resource The Power of UDA in Health Care and Medical Research The Power of UDA in National Security The Power of UDA in Legal Services The Power of UDA for product development The Power of UDA in Sports The future of UDA From small businesses to large multinational organizations, unstructured data provides the opportunity to gain consumer information straight from the source. Data is only as valuable as it is useful, and a robust, effective UDA strategy is the first step toward gaining the full advantage. Unstructured Data Analytics lays this space open for examination, and provides a solid framework for beginning meaningful analysis.

Web Services: Concepts, Methodologies, Tools, and Applications

Data Science for Business

Concepts, Techniques, and Applications

Blockchain in Data Analytics

Unprecedented Paradigmatic Shifts and Practical Advancements

Network Data Analytics

A Hands-On Approach for Application Development

With the advent of new technologies in big data science, the study of medical problems has made significant progress. Connecting medical studies and computational methods is crucial for the advancement of the medical industry. Big Data Analytics in HIV/AIDS Research provides

emerging research on the development and implementation of computational techniques in big data analysis for biological and medical practices. While highlighting topics such as deep learning, management software, and molecular modeling, this publication explores the various applications of data analysis in clinical decision making. This book is a vital resource for medical practitioners, nurses, scientists, researchers, and students seeking current research on the connections between data analytics in the field of medicine.

Data Analytics, Data Analytics: Concepts, Techniques, and Applications compiles the latest trends and issues of the emerging technologies, concepts, and applications that are based on data analytics. The book is for students, researchers, and professionals working in the area of data analytics and is not focused on any specific application. Data Analytics: Concepts, Techniques, and Applications includes chapters covering the fundamental concepts, relevant techniques, and interesting applications of data analysis. The chapters are categorized into three groups with a total of 16 chapters, with contributions from authors around the globe. Section I contains six chapters that cover the fundamental concepts of data analytics. These chapters reflect the important knowledge areas, such as machine learning, regression, clustering, information retrieval, and graph analysis. Section II has six chapters that cover the major techniques of data analytics, such as transition from regular database to big data, big graph analysis tools and techniques, and game theoretical approaches for big data analysis. The rest of the chapters in this section cover topics that lead to newer research domains, including project management, Industry 4.0, and dark data. Section III covers the applications of data analytics in different domains, such as education, traffic offenses, sports data visualization, and, last but not the least, two interesting chapters on cybersecurity for big data analytics with specific focus on the health care sector. Data Analytics: Concepts, Techniques, and Applications is for graduate students, researchers, academics, and industry practitioners working in the areas of data science, machine learning, and other related issues. Book jacket.

Introduction to Data Science and Machine Learning has been created with the goal to provide beginners seeking to learn about data science, data enthusiasts, and experienced data professionals with a deep understanding of data science application development using open-source programming from start to finish. This book is divided into four sections: the first section contains an introduction to the book, the second covers the field of data science, software development, and open-source based embedded hardware; the third section covers algorithms that are the decision engines for data science applications; and the final section brings together the concepts shared in the first three sections and provides several examples of data science applications.

Web service technologies are redefining the way that large and small companies are doing business and exchanging information. Due to the critical need for furthering automation, engagement, and efficiency, systems and workflows are becoming increasingly more web-based. Web Services: Concepts, Methodologies, Tools, and Applications is an innovative reference source that examines relevant theoretical frameworks, current practice guidelines, industry standards and standardization, and the latest empirical research findings in web services. Highlighting a range of topics such as cloud computing, quality of service, and semantic web, this multi-volume book is designed for computer engineers, IT specialists, software designers, professionals, researchers, and upper-level students interested in web services architecture, frameworks, and security.

Entertainment Science

Big Data Analytics for Entrepreneurial Success

Australasian Conference on Information Systems 2018

Big Data Analytics for Satellite Image Processing and Remote Sensing

The Ultimate Beginner's Guide to Data Analytics

Data Wrangling with Pandas, NumPy, and IPython

Data Analysis for Business, Economics, and Policy

This thoroughly revised second edition of "Big Data" introduces application of big data to various domains from farming to healthcare to managing traffic and many more. The book takes a big leap with introduction of three new primer on Data Modeling and Management, Artificial Intelligence and careers in Data Science. Important topics like Big Data Programming languages are simplified and areas like MongoDB have been expanded. The key concepts and technological developments are explained with illustrations. This simple and easy to understand book is aimed for the final year students of Computer Science, professionals and big data enthusiasts. With a series of pictures at the beginning of every chapter from nature and human interaction with it, the book tells a parallel story about life cycle and the many aspects of big data applications in primary education, water resource management, precision farming, finance, etc. Few Highlights: • A new chapter on Data Science careers and job roles • A primer on Artificial Intelligence, and its advantages and threats • A primer on Data Modeling and Management • New section on General Data Protection Rights (GDPR) regime in Europe

Now, a leader of Northwestern University's prestigious analytics program presents a fully-integrated treatment of both the business and academic elements of marketing applications in predictive analytics. Writing for both managers and students, Thomas W. Miller explains essential concepts, principles, and theory in the context of real-world applications. Building on Miller's pioneering program, Marketing Data Science thoroughly addresses segmentation, target marketing, brand and product positioning, new product development, choice modeling, recommender systems, pricing research, retail site selection, demand estimation, sales forecasting, customer retention, and lifetime value analysis. Starting where Miller's widely-praised Modeling Techniques in Predictive Analytics left off, he integrates crucial information and insights that were previously segregated in texts on web analytics, network science, information technology, and programming. Coverage includes: The role of analytics in delivering effective messages on the web Understanding the web by understanding its hidden structures Being recognized on the web – and watching your own competitors Visualizing networks and understanding communities within them Measuring sentiment and making recommendations Leveraging key data science methods: databases/data preparation, classical/Bayesian statistics, regression/classification, machine learning, and text analytics Six complete case studies address exceptionally relevant issues such as: separating legitimate email from spam; identifying legally-relevant information for lawsuit discovery; gleaning insights from anonymous web surfing data, and more. This text's extensive set of web and network problems draw on rich public-domain data sources; many are accompanied by solutions in Python and/or R. Marketing Data Science will be an invaluable resource for all students, faculty, and professional marketers who want to use business analytics to improve marketing performance.

If you are convinced that the world today is producing more data than the previous decades, then you understand that processing yesterday's data for today's use at times is not enough. The level of data analysis that is needed in highly competitive business environment needs to be processed, analyzed and used immediately for businesses to be ahead of their competition. Having this in mind, you need to understand from the ground up, what data is, the different types of data and how you should identify the right data for your business. To help you understand the simple basics of data and how it needs to be analyzed, then Data Analytics for Beginners is the book that you have been waiting for. The size and type of business you are running doesn't matter because after all, it will depend on your ability to understand the data that your business is exposed to so as to make better business decisions

for the current working environment and the future. Are there patterns in your business that you cannot see? Do you want to make sense of the shopping trends of your clients to better enrich their experience? Do you want to know your target market even more? Do you want to better derive insights from the feedback your clients give you? These questions can only be answered when you perform a data analysis for your business. Collecting the data is one thing, analyzing them is another matter entirely as it is not something that can be done haphazardly by just looking at the data. If you hope to understand your data well, you need to understand the data you are collecting, the methods to use and the right tools to use when analyzing the data. Inside you will find valuable steps and tools that will help make your information work for you. Do not let yourself get complacent, stop looking at the data that you collect each day and start analyzing your data to move your business up. Get started by buying this book today! Inside you will find How data should be understood? Terms and concepts used in data analysis. Data mining and the different kinds of databases used to store data. How information can be retrieved and manipulated in the database to create a visual representation of what you want to know? The life cycle of data analysis. And more...

Machine learning and analytics have been widely utilized across the healthcare sector of late. This book will bridge the gap between practicing doctors and you as a data scientist. You will learn how to work with healthcare data and gain better insight from this data to improve healthcare outcomes.

Business Analytics

Analysis, Visualisation and Decision Making in Sports Performance

Numsense! Data Science for the Layman

Using Data Mining for Business Advantage

How High-Tech Tools Profile, Police, and Punish the Poor

The Analytics Revolution in Higher Education

Big Data

This book focuses on three core knowledge requirements for effective and thorough data analysis for solving business problems. These are a foundational understanding of: 1. statistical, econometric, and machine learning techniques; 2. data handling capabilities; 3. at least one programming language. Practical in orientation, the volume offers illustrative case studies throughout and examples using Python in the context of Jupyter notebooks. Covered topics include demand measurement and forecasting, predictive modeling, pricing analytics, customer satisfaction assessment, market and advertising research, and new product development and research. This volume will be useful to business data analysts, data scientists, and market research professionals, as well as aspiring practitioners in business data analytics. It can also be used in colleges and universities offering courses and certifications in business data analytics, data science, and market research.

Gain the competitive edge with the smart use of business analytics In today ' s volatile business environment, the strategic use of business analytics is more important than ever. A Practitioners Guide to Business Analytics helps you get the organizational commitment you need to get business analytics up and running in your company. It provides solutions for meeting the strategic challenges of applying analytics, such as: Integrating analytics into decision making, corporate culture, and business strategy Leading and organizing analytics within the corporation Applying statistical qualifications, statistical diagnostics, and statistical review Providing effective building blocks to support analytics—statistical software, data collection, and data management Randy Bartlett, Ph.D., is Chief Statistical Officer of the consulting company Blue Sigma Analytics. He currently works with Infosys, where he has helped build their new Business Analytics practice.

The scope of image processing and recognition has broadened due to the gap in scientific visualization. Thus, new imaging techniques have developed, and it is imperative to study this progression for optimal utilization. Big Data Analytics for Satellite Image Processing and Remote Sensing is a critical scholarly resource that examines the challenges and difficulties of implementing big data in image processing for remote sensing and related areas. Featuring coverage on a broad range of topics, such as distributed computing, parallel processing, and spatial data, this book is geared towards scientists, professionals, researchers, and academicians seeking current research on the use of big data analytics in satellite image processing and remote sensing.

From cloud computing to data analytics, society stores vast supplies of information through wireless networks and mobile computing. As organizations are becoming increasingly more wireless, ensuring the security and seamless function of electronic gadgets while creating a strong network is imperative. Advanced Methodologies and Technologies in Network Architecture, Mobile Computing, and Data Analytics highlights the challenges associated with creating a strong network architecture in a perpetually online society. Readers will learn various methods in building a seamless mobile computing option and the most effective means of analyzing big data. This book is an important resource for information technology professionals, software developers, data analysts, graduate-level students, researchers, computer engineers, and IT specialists seeking modern information on emerging methods in data mining, information technology, and wireless networks.

A Revolution that Will Transform how We Live, Work, and Think

Big Data, Organizational Learning, and Student Success

A Beginner's Guide to Learn and Master Data Analytics

Python for Data Analysis

Advanced Methodologies and Technologies in Network Architecture, Mobile Computing, and Data Analytics

Techniques in healthcare computing using machine learning and Python

Standardizes the definition and framework of analytics #2 on Book Authority ' s list of the Best New Analytics Books to Read in 2019 (January 2019) We all want to make a difference. We all want our work to enrich the world. As analytics professionals, we are fortunate - this is our time! We live in a world of pervasive data and ubiquitous, powerful computation. This convergence has inspired and accelerated the development of both analytic techniques and tools and this potential for analytics to have an impact has been a huge call to action for organizations, universities, and governments. This title from Institute for Operations Research and the Management Sciences (INFORMS) represents the perspectives of some of the most respected experts on analytics. Readers with various backgrounds in analytics – from novices to experienced professionals – will benefit from reading about and implementing the concepts and methods covered here. Peer reviewed chapters provide readers with in-depth insights and a better understanding of the dynamic field of analytics The INFORMS Analytics Body of Knowledge documents the core concepts and skills with which an analytics professional should be familiar; establishes a dynamic resource that will be used by practitioners to increase their understanding of analytics; and, presents instructors with a framework for developing academic courses and programs in analytics.

Learn how to use data analytics to improve efficiencies, accelerate growth, and increase sales (even if you know NOTHING) What if you could leverage the power of data analytics in your job, in your business, or at school? Imagine being a master of data analytics; solving problems quicker and doing work faster than ever before Multi-time best selling information technology and mathematics author, Edward Mize, presents the perfect data analytics guide for any beginner. With books and a blog that receives tens of thousands of readers monthly, Edward has compiled the most practical data analytics book for a beginner. Well-known and incredibly popular for his ability to teach hard topics in an easy-to-understand way, you won't have any issues learning (and implementing everything you learn). Do you feel like your business or work doesn't benefit from the edge of IT, math, and technology? Do you wish you could quickly and easily fix holes in your execution (marketing, operations, sales, etc.)? Or if the idea of exploring data analytics that can benefit your work, business, or school sounds appealing... THEN THIS BOOK IS FOR YOU In this book, you will get: A comprehensive breakdown of everything you learn so that it is easy-to-understand and perfect for anyone who is a beginner. An understanding of the edge that business intelligence and data analytics plays in the real world today. An introduction to the different types of data analytics, what it means in the real world, and how you can apply it in your life for better quality and more powerful results. Edward's personal email address for unlimited customer support if you have any questions And much, much more... Well, what are you waiting for? Grab your copy today by clicking the BUY NOW button at the top of this page

Used in Stanford's CS102 Big Data (Spring 2017) course. Want to get started on data science? Our promise: no math added. This book has been written in layman's terms as a gentle introduction to data science and its algorithms. Each algorithm has its own dedicated chapter that explains how it works, and shows an example of a real-world application. To help you grasp key concepts, we stick to intuitive explanations, as well as lots of visuals, all of which are colorblind-friendly. Popular concepts covered include: A/B Testing Anomaly Detection Association Rules Clustering Decision Trees and Random Forests Regression Analysis Social Network Analysis Neural Networks Features: Intuitive explanations and visuals Real-world applications to illustrate each algorithm Point summaries at the end of each chapter Reference sheets comparing the pros and cons of algorithms Glossary list of commonly-used terms With this book, we hope to give you a practical understanding of data science, so that you, too, can leverage its strengths in making better decisions.

Don't let a fear of numbers hold you back. Today's business environment brings with it an onslaught of data. Now more than ever, managers must know how to tease insight from data--to understand where the numbers come from, make sense of them, and use them to inform tough decisions. How do you get started? Whether you're working with data experts or running your own tests, you'll find answers in the HBR Guide to Data Analytics Basics for Managers. This book describes three key steps in the data analysis process, so you can get the information you need, study the data, and communicate your findings to others. You'll learn how to: Identify the metrics you need to measure Run experiments and A/B tests Ask the right questions of your data experts Understand statistical terms and concepts Create effective charts and visualizations Avoid common mistakes

Automating Inequality

Data Analytics

Big Data Analytics in HIV/AIDS Research

How to Improve Customer Acquisition, Customer Retention, and Fraud Detection and Prevention

Sports Analytics

Healthcare Analytics Made Simple

Confident Data Skills

Advancements in data science have created opportunities to sort, manage, and analyze large amounts of data more effectively and efficiently. Applying these new technologies to the healthcare industry, which has vast quantities of patient and medical data and is increasingly becoming more data-reliant, is crucial for refining medical practices and patient care. Data Analytics in Medicine: Concepts, Methodologies, Tools, and Applications is a vital reference source that examines practical applications of healthcare analytics for improved patient care, resource allocation, and medical performance, as well as for diagnosing, predicting, and identifying at-risk populations. Highlighting a range of topics such as data security and privacy, health informatics, and predictive analytics, this multi-volume book is ideally designed for doctors, hospital administrators, nurses, medical professionals, IT specialists, computer engineers, information technologists, biomedical engineers, data-processing specialists, healthcare practitioners, academicians, and researchers interested in current research on the connections between data analytics in the field of medicine.

Blockchain technology facilitates a decentralized database where business is rendered transparent without the involvement of middlemen. The first use of this technology was its application in digital currency (bitcoin). However, other potential uses of blockchain are yet to be explored. It is expected to have a major impact on cyber security, the internet of things, supply chain management, market prediction, governance, information management, and financial transactions, among others. Blockchain has redesigned the way in which people deal with their money due to its effectiveness, especially in terms of security. Therefore, from the data analytics point of view, investigation of the application of blockchain technology in a wide range of domains is crucial. In this context, this book provides a broad picture of the concepts, techniques, applications, and open research directions in this area, and will serve as a single source of reference for acquiring knowledge on this emerging technology.

Big Data is the biggest game-changing opportunity for marketing and sales since the Internet went mainstream almost 20 years ago. The data big bang has unleashed torrents of terabytes about everything from customer behaviors to weather patterns to demographic consumer shifts in emerging markets. This collection of articles, videos, interviews, and slideshares highlights the most important lessons for companies looking to turn data into above-market growth: Using analytics to identify valuable business opportunities from the data to drive decisions and improve marketing return on investment (MROI) Turning those insights into well-designed products and offers that delight customers Delivering those products and offers effectively to the marketplace. The goldmine of data represents a pivot-point moment for marketing and sales leaders. Companies that inject big data and analytics into their operations show productivity rates and profitability that are 5 percent to 6 percent higher than those of their peers. That's an advantage no company can afford to ignore.

The different facets of the sharing economy offer numerous opportunities for businesses ? particularly those that can be distinguished by their creative ideas and their ability to easily connect buyers and senders of goods and services via digital platforms. At the beginning of the growth of this economy, the advanced digital technologies generated billions of bytes of data that constitute what we call Big Data. This book underlines the facilitating role of Big Data analytics, explaining why and how data analysis algorithms can be integrated operationally, in order to extract value and to improve the practices of the sharing economy. It examines the reasons why these new techniques are necessary for businesses of this economy and proposes a series of useful applications that

illustrate the use of data in the sharing ecosystem.

Data Analytics and Practical Theory for Movies, Games, Books, and Music

Creating Value with Social Media Analytics

A PRACTITIONER'S GUIDE TO BUSINESS ANALYTICS: Using Data Analysis Tools to Improve Your Organization's Decision Making and Strategy

Big Data, Analytics, and the Future of Marketing & Sales

Big Data: Second Edition

Sharing Economy and Big Data Analytics

Data Science for Business Problems

Often termed as the "new gold," the vast amount of social media data can be employed to identify which customer behavior and actions create more value. Nevertheless, many brands find it extremely hard to define what the value of social media is and how to capture and create value with social media data. In *Creating Value with Social Media Analytics*, we draw on developments in social media analytics theories and tools to develop a comprehensive social media value creation framework that allows readers to define, align, capture, and sustain value through social media data. The book offers concepts, strategies, tools, tutorials, and case studies that brands need to align, extract, and analyze a variety of social media data, including text, actions, networks, multimedia, apps, hyperlinks, search engines, and location data. By the end of this book, the readers will have mastered the theories, concepts, strategies, techniques, and tools necessary to extract business value from big social media that help increase brand loyalty, generate leads, drive traffic, and ultimately make sound business decisions. Here is how the book is organized. Chapter 1: Creating Value with Social Media Analytics Chapter 2: Understanding Social Media Chapter 3: Understanding Social Media Analytics Chapter 4: Analytics-Business Alignment Chapter 5: Capturing Value with Network Analytics Chapter 6: Capturing Value with Text Analytics Chapter 7: Capturing Value with Actions Analytics Chapter 8: Capturing Value with Search Engine Analytics Chapter 9: Capturing Value with Location Analytics Chapter 10: Capturing Value with Hyperlinks Analytics Chapter 11: Capturing Value with Mobile Analytics Chapter 12: Capturing Value with Multimedia Analytics Chapter 13: Social Media Analytics Capabilities Chapter 14: Social Media Security, Privacy, & Ethics The book has a companion site (<https://analytics-book.com/>), which offers useful instructor resources. Praises for the book "Gohar F. Khan has a flair for simplifying the complexity of social media analytics. *Creating Value with Social Media Analytics* is a beautifully delineated roadmap to creating and capturing business value through social media. It provides the theories, tools, and creates a roadmap to leveraging social media data for business intelligence purposes. Real world analytics cases and tutorials combined with a comprehensive companion site make this an excellent textbook for both graduate and undergraduate students."-Robin Saunders, Director of the Communications and Information Management Graduate Programs, Bay Path University. "Creating Value with Social Media Analytics offers a comprehensive framework to define, align, capture, and sustain business value through social media data. The book is theoretically grounded and practical, making it an excellent resource for social media analytics courses."-Haya Ajjan, Director & Associate Prof., Elon Center for Organizational Analytics, Elon University. "Gohar Khan is a pioneer in the emerging domain of social media analytics. This latest text is a must-read for business leaders, managers, and academicians, as it provides a clear and concise understanding of business value creation with social media data from a social lens."-Laeq Khan, Director, Social Media Analytics Research Team, Ohio University. "Whether you are coming from a business, research, science or art background, *Creating Value with Social Media Analytics* is a brilliant induction resource for those entering the social media analytics industry. The insightful case studies and carefully crafted tutorials are the perfect supplements to help digest the key concepts introduced in each chapter."-Jared Wong, Social Media Data Analyst, Digivizer "It is one of the most comprehensive books on analytics that I have come across recently."-Bobby Swar, Prof. Concordia Uni. This revelatory exploration of big data, which refers to our newfound ability to crunch vast amounts of information, analyze it instantly and draw profound and surprising conclusions from it, discusses how it will change our lives and what we can do to protect ourselves from its hazards. 75,000 first printing. As the analysis of big datasets in sports performance becomes a more entrenched part of the sporting landscape, so the value of sport scientists and analysts with formal training in data analytics grows. *Sports Analytics: Analysis, Visualisation and Decision Making in Sports Performance* provides the most authoritative and comprehensive guide to the use of analytics in sport and its application in sports performance, coaching, talent identification and sports medicine available. Employing an approach-based structure and integrating problem-based learning throughout the text, the book clearly defines the difference between analytics and analysis and goes on to explain and illustrate methods including: Interactive visualisation Simulation and modelling Geospatial data analysis Spatiotemporal analysis Machine learning Genomic data analysis Social network analysis Offering a mixed-methods case study chapter, no other book offers the same level of scientific grounding or practical application in sports data analytics. *Sports Analytics* is essential reading for all students of sports analytics, and useful supplementary reading for students and professionals in talent identification and development, sports performance analysis, sports medicine and applied computer science.

Predictive analytics has revolutionized marketing practice. It involves using many techniques from data mining, statistics, modelling, machine learning and artificial intelligence, to analyse current data and make predictions about unknown future events. In business terms, this enables companies to

forecast consumer behaviour and much more. Predictive Analytics for Marketers will guide marketing professionals on how to apply predictive analytical tools to streamline business practices. Including comprehensive coverage of an array of predictive analytic tools and techniques, this book enables readers to harness patterns from past data, to make accurate and useful predictions that can be converted to business success. Truly global in its approach, the insights these techniques offer can be used to manage resources more effectively across all industries and sectors. Written in clear, non-technical language, Predictive Analytics for Marketers contains case studies from the author's more than 25 years of experience and articles from guest contributors, demonstrating how predictive analytics has been used to successfully achieve a range of business purposes.

Artificial Intelligence and Machine Learning for Business

Introduction to Data Science and Machine Learning

No Math Added

Big Data Science and Analytics for Smart Sustainable Urbanism

HBR Guide to Data Analytics Basics for Managers (HBR Guide Series)

Managing, Aligning, and Mining Social Media Text, Networks, Actions, Location, Apps, Hyperlinks, Multimedia, & Search Engines Data

Capitalism, Power and Perception

A comprehensive textbook on data analysis for business, applied economics and public policy that uses case studies world data.

In a resolutely practical and data-driven project universe, the digital age changed the way data is collected, stored, visualized and protected, transforming business opportunities and strategies. It is important for today's organizations and entrepreneurs to implement a robust data strategy and industrialize a set of "data-driven" solutions to utilize big data to its fullest potential. Big Data Analytics for Entrepreneurial Success provides emerging perspectives on the theoretical and practical aspects of data analysis tools and techniques within business applications. Featuring coverage on a broad range of topics such as algorithms, data collection, and machine learning, this publication provides concrete examples and case studies of successful uses of data-driven projects as well as the challenges and opportunities of generating value from data use. It is ideally designed for entrepreneurs, researchers, business owners, managers, graduate students, academicians, software developers, and IT professionals seeking current research on the essential tools and technologies for organizing, analyzing, and benefiting from big data.

Written by renowned data science experts Foster Provost and Tom Fawcett, Data Science for Business introduces the fundamental principles of data science, and walks you through the "data-analytic thinking" necessary for extracting knowledge and business value from the data you collect. This guide also helps you understand the many data-mining techniques in use today. Based on an MBA course Provost has taught at New York University over the past ten years, Data Science for Business provides examples of real-world business problems to illustrate these principles. You'll not only learn how to communicate between business stakeholders and data scientists, but also how to participate intelligently in your company's data science projects. You'll also discover how to think data-analytically, and fully appreciate how data science methods can inform business decision-making. Understand how data science fits in your organization—and how you can use it for competitive advantage. Treat data as a business asset that requires careful investment if you're to gain real value. Approach business data-analytically, using the data-mining process to gather good data in the most appropriate way. Learn general concepts about actually extracting knowledge from data. Apply data science principles when interviewing data science job candidates.

Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython "O'Reilly Media, Inc."

Concepts, Methodologies, Tools, and Applications

Storytelling with Data

Changing the Way You Think About, Plan, and Execute Business Intelligence for Real Results, Real Fast!

Modeling Techniques in Predictive Analytics with R and Python

A No-Nonsense Guide to Data Driven Technologies

Let's Practice!

The Data Gaze

A significant new way of understanding contemporary capitalism is to understand the intensification and spread of data analytics. This text is about the powerful promises and visions that have led to the expansion of data analytics and data-led forms of social ordering. It is centrally concerned with examining the types of knowledge associated with data analytics and shows that how these analytics are envisioned is central to the emergence and prominence of data at various scales of social life. This text aims to understand the powerful role of the data analytics industry and how this industry facilitates the spread and intensification of data-led processes. As such, The Data Gaze is concerned with understanding how data-led, data-driven and data-reliant forms of capitalism pervade organisational and everyday life. Using a clear theoretical approach derived from Foucault and critical data studies the text develops the concept of the data gaze and shows how powerful and persuasive it is. It's an essential and subversive guide to data analytics and data capitalism.

Co-published with AIR.  Co-published with ACE.  In this era of "Big Data," institutions of higher education are challenged to make the most of the information they have to improve student learning outcomes, close equity gaps, keep costs down, and address the economic needs of the communities they serve at the local, regional, and national levels. This book helps readers understand and respond to this "analytics revolution," examining the evolving dynamics of the institutional research (IR) function, and the many audiences that institutional researchers need to serve. Internally, there is a growing need among senior leaders, administrators, faculty, advisors, and staff for decision analytics that help craft better resource strategies and bring greater efficiencies and return-on-investment for students and families. Externally, state legislators, the federal government, and philanthropies demand more forecasting and more evidence than ever before. These demands require new and creative responses, as they are added to previous demands, rather than

replacing them, nor do they come with additional resources to produce the analysis to make data into actionable improvements. Thus the IR function must become that of teacher, ensuring that data and analyses are accurate, timely, accessible, and compelling, whether produced by an IR office or some other source. Despite formidable challenges, IR functions have begun to leverage big data and unlock the power of predictive tools and techniques, contributing to improved student outcomes.

Data science is the most exciting skill you can master. Data has dramatically changed how our world works. From entertainment to politics, from technology to advertising and from science to the business world, data is integral and its only limit is our imagination. If you want to have a vibrant and valuable professional life, being skilled with data is the key to a cutting-edge career. Learning how to work with data may seem intimidating or difficult but with *Confident Data Skills* you will be able to master the fundamentals and supercharge your professional abilities. This essential book covers data mining, preparing data, analysing data, communicating data, financial modelling, visualizing insights and presenting data through film making and dynamic simulations. In-depth international case studies from a wide range of organizations, including Netflix, LinkedIn, Goodreads, Deep Blue, Alpha Go and Mike's Hard Lemonade Co. show successful data techniques in practice and inspire you to turn knowledge into innovation. *Confident Data Skills* also provides insightful guidance on how you can use data skills to enhance your employability and improve how your industry or company works through your data skills. Expert author and instructor, Kirill Eremenko, is committed to making the complex simple and inspiring you to have the confidence to develop an understanding, adeptness and love of data.

Influence action through data! This is not a book. It is a one-of-a-kind immersive learning experience through which you can become—or teach others to be—a powerful data storyteller. *Let's practice!* helps you build confidence and credibility to create graphs and visualizations that make sense and weave them into action-inspiring stories. Expanding upon best seller *storytelling with data's* foundational lessons, *Let's practice!* delivers fresh content, a plethora of new examples, and over 100 hands-on exercises. Author and data storytelling maven Cole Nussbaumer Knaflic guides you along the path to hone core skills and become a well-practiced data communicator. Each chapter includes: □ Practice with Cole: exercises based on real-world examples first posed for you to consider and solve, followed by detailed step-by-step illustration and explanation □ Practice on your own: thought-provoking questions and even more exercises to be assigned or worked through individually, without prescribed solutions □ Practice at work: practical guidance and hands-on exercises for applying storytelling with data lessons on the job, including instruction on when and how to solicit useful feedback and refine for greater impact The lessons and exercises found within this comprehensive guide will empower you to master—or develop in others—data storytelling skills and transition your work from acceptable to exceptional. By investing in these skills for ourselves and our teams, we can all tell inspiring and influential data stories!

INFORMS Analytics Body of Knowledge

What You Need to Know about Data Mining and Data-Analytic Thinking

Data Analytics for Beginners

Master the Fundamentals of Working with Data and Supercharge Your Career

Data Analytics in Medicine: Concepts, Methodologies, Tools, and Applications

Hyper

Predictive Analytics for Marketers

WINNER: The 2018 McGannon Center Book Prize and shortlisted for the Goddard Riverside Stephan Russo Book Prize for Social Justice The New York Times Book Review: "Riveting." Naomi Klein: "This book is downright scary." Ethan Zuckerman, MIT: "Should be required reading." Dorothy Roberts, author of Killing the Black Body: "A must-read." Astra Taylor, author of The People's Platform: "The single most important book about technology you will read this year." Cory Doctorow: "Indispensable." A powerful investigative look at data-based discrimination—and how technology affects civil and human rights and economic equity The State of Indiana denies one million applications for healthcare, foodstamps and cash benefits in three years—because a new computer system interprets any mistake as “failure to cooperate.” In Los Angeles, an algorithm calculates the comparative vulnerability of tens of thousands of homeless people in order to prioritize them for an inadequate pool of housing resources. In Pittsburgh, a child welfare agency uses a statistical model to try to predict which children might be future victims of abuse or neglect. Since the dawn of the digital age, decision-making in finance, employment, politics, health and human services has undergone revolutionary change. Today, automated systems—rather than humans—control which neighborhoods get policed, which families attain needed resources, and who is investigated for fraud. While we all live under this new regime of data, the most invasive and punitive systems are aimed at the poor. In *Automating Inequality*, Virginia Eubanks systematically investigates the impacts of data mining, policy algorithms, and predictive risk models on poor and working-class people in America. The book is full of heart-wrenching and eye-opening stories, from a woman in Indiana whose benefits are literally cut off as she lays dying to a family in Pennsylvania in daily fear of losing their daughter because they fit a certain statistical profile. The U.S. has always used its most cutting-edge science and technology to contain, investigate, discipline and punish the destitute. Like the county poorhouse and scientific charity before them, digital tracking and automated decision-making hide poverty from the middle-class public and give the nation the ethical distance it needs to make inhumane choices: which families get food and which starve, who has housing and who remains homeless, and which families are broken up by the state. In the process, they weaken democracy and betray our most cherished national values. This deeply researched and passionate book could not be more timely.

2016 eLIT GOLD AWARD - BEST BUSINESS REFERENCE BOOKNOMINATED FOR 2016 SMALL BUSINESS BOOK AWARDSToday, an organization's survival ultimately rests on how well (and fast!) it creates value. That's why decision-makers consistently rate business intelligence as one of their top investment priorities. They depend on information to help them compete in a world where disruption is a constant and speed an obsession. But recognizing the need for BI is one thing. Effectively using it to create value is an entirely different matter. *Hyper* is the essential quick-read guide for busy business and IT professionals struggling to make BI work. Packed with pragmatic advice, proven methods, and real-world tools, this book provides straight talk on how to finally deliver BI in a hyper-responsive, hyper-agile, and hyper-flexible way. Inside you will discover:* Ways to overcome the 4

primary challenges associated with BI planning and execution* Methods to create, validate, and communicate requirements that accelerate decision-making* How to deliver quick wins that drive end-user adoption and long-lasting solutionsPlus, you'll find practical tips from years of hands-on field work. Hyper will change the way you think about, plan, and execute BI. For real results, real fast!**TABLE OF CONTENTS**Foreword"The Age Of The Customer Demands A New Approach To BI Planning and Execution" by Boris Evelson, Vice President and Principal Analyst | Forrester Research, Inc.**Section 1 - Understanding BI - Chapter 1 - Value Creation - Chapter 2 - The BI Value Chain - Chapter 3 - Value Enablers - Chapter 4 - The Problem with BI****Section 2 - The Imperatives for Success - Chapter 5 - Addressing the Problem with BI - Chapter 6 - Unify - Chapter 7 - Simplify - Chapter 8 - Amplify - Chapter 9 - Qualify - Chapter 10 - The Importance of Collaboration****Section 3 - Methods to Accelerate Planning - Chapter 11 - Building Requirements for Quick Wins and Beyond - Chapter 12 - Painting the Big Picture - Chapter 13 - Prioritizing Mission-Critical Information Needs - Chapter 14 - Building the Information Universe - Chapter 15 - Validating the Information Model - Chapter 16 - Bridging the Gap Between Business and IT - Chapter 17 - Mapping the Data - Chapter 18 - Creating the Execution Plan - Chapter 19 - Documenting Your Findings****Section 4 - Ways to Accelerate Execution - Chapter 20 - Be Quick and Nimble - Chapter 21 - Socialize, Market and Sell - Chapter 22 - Monitor, Evaluate and Evolve - Chapter 23 - Bringing It All Together****Section 5 - Beyond Planning and Execution - Chapter 24 - Effective Group Facilitation - Chapter 25 - Thoughts On Information Delivery - Chapter 26 - Another Perspective on Big Data - Chapter 27 - Working With Consultants - Chapter 28 - Characteristics of a Hyper Mindset - Chapter 29 - A Final Word****Recommended Resources - Websites - Research Community - Professional Services Organizations - Specialists**

Artificial Intelligence (AI) and Machine Learning are now mainstream business tools. They are being applied across many industries to increase profits, reduce costs, save lives and improve customer experiences.

Organizations which understand these tools and know how to use them are benefiting at the expense of their rivals. Artificial Intelligence and Machine Learning for Business cuts through the hype and technical jargon that is often associated with these subjects. It delivers a simple and concise introduction for managers and business people. The focus is very much on practical application and how to work with technical specialists (data scientists) to maximize the benefits of these technologies. This third edition has been substantially revised and updated. It contains several new chapters and covers a broader set of topics than before, but retains the no-nonsense style of the original.

We are living at the dawn of what has been termed 'the fourth paradigm of science,' a scientific revolution that is marked by both the emergence of big data science and analytics, and by the increasing adoption of the underlying technologies in scientific and scholarly research practices. Everything about science development or knowledge production is fundamentally changing thanks to the ever-increasing deluge of data. This is the primary fuel of the new age, which powerful computational processes or analytics algorithms are using to generate valuable knowledge for enhanced decision-making, and deep insights pertaining to a wide variety of practical uses and applications. This book addresses the complex interplay of the scientific, technological, and social dimensions of the city, and what it entails in terms of the systemic implications for smart sustainable urbanism. In concrete terms, it explores the interdisciplinary and transdisciplinary field of smart sustainable urbanism and the unprecedented paradigmatic shifts and practical advances it is undergoing in light of big data science and analytics. This new era of science and technology embodies an unprecedentedly transformative and constitutive power—manifested not only in the form of revolutionizing science and transforming knowledge, but also in advancing social practices, producing new discourses, catalyzing major shifts, and fostering societal transitions. Of particular relevance, it is instigating a massive change in the way both smart cities and sustainable cities are studied and understood, and in how they are planned, designed, operated, managed, and governed in the face of urbanization. This relates to what has been dubbed data-driven smart sustainable urbanism, an emerging approach based on a computational understanding of city systems and processes that reduces urban life to logical and algorithmic rules and procedures, while also harnessing urban big data to provide a more holistic and integrated view or synoptic intelligence of the city. This is increasingly being directed towards improving, advancing, and maintaining the contribution of both sustainable cities and smart cities to the goals of sustainable development. This timely and multifaceted book is aimed at a broad readership. As such, it will appeal to urban scientists, data scientists, urbanists, planners, engineers, designers, policymakers, philosophers of science, and futurists, as well as all readers interested in an overview of the pivotal role of big data science and analytics in advancing every academic discipline and social practice concerned with data-intensive science and its application, particularly in relation to sustainability.

Marketing Data Science

Unstructured Data Analytics