

Artificial Intelligence Foundations For Business

Eventually, you will certainly discover a extra experience and ability by spending more cash. nevertheless when? do you understand that you require to acquire those all needs past having significantly cash? Why dont you attempt to get something basic in the beginning? Thats something that will lead you to comprehend even more a propos the globe, experience, some places, in the manner of history, amusement, and a lot more?

It is your completely own epoch to put it on reviewing habit. in the midst of guides you could enjoy now is **Artificial Intelligence Foundations For Business** below.

AI Superpowers - Kai-Fu Lee 2018-09-25

Introduction -- China's Sputnik moment -- Copycats in the Coliseum -- China's alternate Internet universe -- A tale of two countries -- The four waves of AI -- Utopia, dystopia, and the real AI crisis -- The wisdom of cancer -- A blueprint for human co-existence with AI -- Our global AI story

Applications of Artificial Intelligence in Business and Finance - Vikas Garg 2021-12-23

As transactions and other business functions move online and grow more popular every year, the finance and banking industries face increasingly complex data management and identity theft and fraud issues. AI can bring many financial and business functions to the next level, as systems using deep learning technologies are able to analyze patterns and spot suspicious behavior and potential fraud. In this volume, the focus is on the application of artificial intelligence in finance, business, and related areas. The book presents a selection of chapters presenting cutting-edge research on current business practices in finance and management. Topics cover the use of AI in e-commerce systems, financial services, fraud prevention, identifying loan-eligible customers, online business, Facebook social commerce, insurance industry, online marketing, and more.

Artificial Intelligence - Harvard Business Review 2019

Companies that don't use AI to their advantage will soon be left behind. Artificial intelligence and machine learning will drive a massive reshaping of the economy and society. What should you and your company be doing right now to ensure that your business is poised for success? These articles by AI experts and consultants will help you understand today's essential thinking on what AI is capable of now, how to adopt it in your organization, and how the technology is likely to evolve in the near future. Artificial Intelligence: The Insights You Need from Harvard Business Review will help you spearhead important conversations, get going on the right AI initiatives for your company, and capitalize on the opportunity of the machine intelligence revolution. Catch up on current topics and deepen your understanding of them with the Insights You Need series from Harvard Business Review. Featuring some of HBR's best and most recent thinking, Insights You Need titles are both a primer on today's most pressing issues and an extension of the conversation, with interesting research, interviews, case studies, and practical ideas to help you explore how a particular issue will impact your company and what it will mean for you and your business.

Business Intelligence and Human Resource Management - Deepmala Singh 2022-08-31

Business Intelligence (BI) is a solution to modern business problems. This book discusses the relationship between BI and Human Resource Management (HRM). In addition, it discusses how BI can be used as a strategic decision-making tool for the sustainable growth of an organization or business. BI helps organizations generate interactive reports with clear and reliable data for making numerous business decisions. This book covers topics spanning the important areas of BI in the context of HRM. It gives an overview of the aspects, tools, and techniques of BI and how it can assist HRM in creating a successful future for organizations. Some of the tools and techniques discussed in the book are analysis, data preparation, BI-testing, implementation, and optimization on GR and management disciplines. It will include a chapter on text mining as well as a section of case studies for practical use. This book will be useful for business professionals, including but not limited to, HR professionals, and budding business students.

Demystifying AI for the Enterprise - Prashant Natarajan 2021-12-31

Artificial intelligence (AI) in its various forms -- machine learning, chatbots, robots, agents, etc. -- is

increasingly being seen as a core component of enterprise business workflow and information management systems. The current promise and hype around AI are being driven by software vendors, academic research projects, and startups. However, we posit that the greatest promise and potential for AI lies in the enterprise with its applications touching all organizational facets. With increasing business process and workflow maturity, coupled with recent trends in cloud computing, datafication, IoT, cybersecurity, and advanced analytics, there is an understanding that the challenges of tomorrow cannot be solely addressed by today's people, processes, and products. There is still considerable mystery, hype, and fear about AI in today's world. A considerable amount of current discourse focuses on a dystopian future that could adversely affect humanity. Such opinions, with understandable fear of the unknown, don't consider the history of human innovation, the current state of business and technology, or the primarily augmentative nature of tomorrow's AI. This book demystifies AI for the enterprise. It takes readers from the basics (definitions, state-of-the-art, etc.) to a multi-industry journey, and concludes with expert advice on everything an organization must do to succeed. Along the way, we debunk myths, provide practical pointers, and include best practices with applicable vignettes. AI brings to enterprise the capabilities that promise new ways by which professionals can address both mundane and interesting challenges more efficiently, effectively, and collaboratively (with humans). The opportunity for tomorrow's enterprise is to augment existing teams and resources with the power of AI in order to gain competitive advantage, discover new business models, establish or optimize new revenues, and achieve better customer and user satisfaction.

Artificial Intelligence and Business Management - Derek Partridge 1992

After introducing the concept of artificial intelligence (AI), the authors of this text discuss the scope and limitations of AI technology in the various subfields that are expected to be relevant to business management systems - natural language processing, voice processing, image processing, and intelligent robots.

Artificial Intelligence with Python - Prateek Joshi 2017-01-27

Build real-world Artificial Intelligence applications with Python to intelligently interact with the world around you About This Book Step into the amazing world of intelligent apps using this comprehensive guide Enter the world of Artificial Intelligence, explore it, and create your own applications Work through simple yet insightful examples that will get you up and running with Artificial Intelligence in no time Who This Book Is For This book is for Python developers who want to build real-world Artificial Intelligence applications. This book is friendly to Python beginners, but being familiar with Python would be useful to play around with the code. It will also be useful for experienced Python programmers who are looking to use Artificial Intelligence techniques in their existing technology stacks. What You Will Learn Realize different classification and regression techniques Understand the concept of clustering and how to use it to automatically segment data See how to build an intelligent recommender system Understand logic programming and how to use it Build automatic speech recognition systems Understand the basics of heuristic search and genetic programming Develop games using Artificial Intelligence Learn how reinforcement learning works Discover how to build intelligent applications centered on images, text, and time series data See how to use deep learning algorithms and build applications based on it In Detail Artificial Intelligence is becoming increasingly relevant in the modern world where everything is driven by technology and data. It is used extensively across many fields such as search engines, image recognition,

robotics, finance, and so on. We will explore various real-world scenarios in this book and you'll learn about various algorithms that can be used to build Artificial Intelligence applications. During the course of this book, you will find out how to make informed decisions about what algorithms to use in a given context. Starting from the basics of Artificial Intelligence, you will learn how to develop various building blocks using different data mining techniques. You will see how to implement different algorithms to get the best possible results, and will understand how to apply them to real-world scenarios. If you want to add an intelligence layer to any application that's based on images, text, stock market, or some other form of data, this exciting book on Artificial Intelligence will definitely be your guide! Style and approach This highly practical book will show you how to implement Artificial Intelligence. The book provides multiple examples enabling you to create smart applications to meet the needs of your organization. In every chapter, we explain an algorithm, implement it, and then build a smart application.

[The AI Marketing Canvas](#) - Raj Venkatesan 2021-05-18

This book offers a direct, actionable plan CMOs can use to map out initiatives that are properly sequenced and designed for success—regardless of where their marketing organization is in the process. The authors pose the following critical questions to marketers: (1) How should modern marketers be thinking about artificial intelligence and machine learning? and (2) How should marketers be developing a strategy and plan to implement AI into their marketing toolkit? The opening chapters provide marketing leaders with an overview of what exactly AI is and how is it different than traditional computer science approaches.

Venkatesan and Lecinski, then, propose a best-practice, five-stage framework for implementing what they term the "AI Marketing Canvas." Their approach is based on research and interviews they conducted with leading marketers, and offers many tangible examples of what brands are doing at each stage of the AI Marketing Canvas. By way of guidance, Venkatesan and Lecinski provide examples of brands—including Google, Lyft, Ancestry.com, and Coca-Cola—that have successfully woven AI into their marketing strategies. The book concludes with a discussion of important implications for marketing leaders—for your team and culture.

[Machine Learning Foundations](#) - Taeho Jo 2021-02-12

This book provides conceptual understanding of machine learning algorithms through supervised, unsupervised, and advanced learning techniques. The book consists of four parts: foundation, supervised learning, unsupervised learning, and advanced learning. The first part provides the fundamental materials, background, and simple machine learning algorithms, as the preparation for studying machine learning algorithms. The second and the third parts provide understanding of the supervised learning algorithms and the unsupervised learning algorithms as the core parts. The last part provides advanced machine learning algorithms: ensemble learning, semi-supervised learning, temporal learning, and reinforced learning. Provides comprehensive coverage of both learning algorithms: supervised and unsupervised learning; Outlines the computation paradigm for solving classification, regression, and clustering; Features essential techniques for building the a new generation of machine learning.

[Handbook of Research on Applied Data Science and Artificial Intelligence in Business and Industry](#) - Chkoniya, Valentina 2021-06-25

The contemporary world lives on the data produced at an unprecedented speed through social networks and the internet of things (IoT). Data has been called the new global currency, and its rise is transforming entire industries, providing a wealth of opportunities. Applied data science research is necessary to derive useful information from big data for the effective and efficient utilization to solve real-world problems. A broad analytical set allied with strong business logic is fundamental in today's corporations. Organizations work to obtain competitive advantage by analyzing the data produced within and outside their organizational limits to support their decision-making processes. This book aims to provide an overview of the concepts, tools, and techniques behind the fields of data science and artificial intelligence (AI) applied to business and industries. The Handbook of Research on Applied Data Science and Artificial Intelligence in Business and Industry discusses all stages of data science to AI and their application to real problems across industries—from science and engineering to academia and commerce. This book brings together practice and science to build successful data solutions, showing how to uncover hidden patterns and leverage them to improve all aspects of business performance by making sense of data from both web and

offline environments. Covering topics including applied AI, consumer behavior analytics, and machine learning, this text is essential for data scientists, IT specialists, managers, executives, software and computer engineers, researchers, practitioners, academicians, and students.

[Reimagining Businesses with AI](#) - Sudhi Sinha 2020-10-20

Discover what AI can do for your business with this approachable and comprehensive resource Reimagining Businesses with AI acquaints readers with both the business challenges and opportunities presented by the rapid growth and progress of artificial intelligence. The accomplished authors and digital executives of the book provide you with a multi-industry approach to understanding the intersection of AI and business. The book walks you through the process of recognizing and capitalizing on AI's potential for your own business. The authors describe: How to build a technological foundation that allows for the rapid implementation of artificial intelligence How to manage the disruptive nature of powerful technology while simultaneously harnessing its capabilities The ethical implications and security and privacy concerns raised by the spread of AI Perfect for business executives and managers who seek a jargon-free and approachable manual on how to implement artificial intelligence in everyday operations, Reimagining Businesses with AI also belongs on the bookshelves of anyone curious about the interaction between artificial intelligence and business.

[The Executive's Guide to AI and Analytics](#) - Scott Burk 2022-06-06

Professionals are challenged each day by a changing landscape of technology and terminology. In recent history, especially the last 25 years there has been an explosion of terms and methods born that automate and improve decision-making and operations. One term called Analytics is an overarching description of a compilation of methodologies. But, AI (Artificial Intelligence), statistics, decision science, optimization which have been around for decades has resurged. Also, things like business intelligence, On-line Analytical Processing (OLAP) and many, many more have been born or reborn. How is someone to make sense of all this methodology, terminology? This book is meant to be read by the CEO and other executive decision makers in an organization, so that they can plan and implement a successful AI or analytics program. It builds on the information shared in It's All Analytics: The AI, Analytics and Data Science Landscape for Professionals in Healthcare, Business and Government, the first book in a series of three. Book II in this series is more for the lower level executive, manager or analytics architect responsible for design decisions at a broad and detailed level. And others that will be involved in the implementation of a successful analytics program. But in order to do that, these personnel need the full backing of the CEO and executive decision makers. It is appropriately focused on the business and people as well as the technology, emphasizing the need of the CEO and related decision makers to be fully engaged in the program, in order to have success. It's a quick read by senior level managers to provide a better understanding of analytics, AI and data science to help guide them in their decision-making process.

[Using Artificial Intelligence in Marketing](#) - Katie King 2019-02-03

Artificial intelligence (AI) marketing is paving the way for the future of marketing and business transformation, yet many organizations struggle to know exactly how and where to integrate it. With AI forecasted to boost global GDP by 14% by 2030, an efficient and sustainable AI marketing strategy is now essential to avoid losing the competitive edge. Using Artificial Intelligence in Marketing provides the definitive, practical framework needed for marketers to identify, apply and embrace the opportunity to maximize the results and business advancement that AI can bring. Streamlining efficiencies into every business practice, AI automates simpler, repetitive tasks with unrivalled accuracy, allowing sales and marketing teams to return their attention to where human interaction is most valuable: strategy, creativity and personal connection. Using Artificial Intelligence in Marketing outlines key marketing benefits such as accurate market research samples, immediate big data insights and brand-safe content creation, right through to the on-demand customer service that is now expected 24/7. It also explores the inevitable myths, concerns and ethical questions that can arise from the large-scale adoption of AI. This book is an essential read for every 21st century marketer.

[Logical Foundations of Artificial Intelligence](#) - Michael R. Genesereth 2012-07-05

Intended both as a text for advanced undergraduates and graduate students, and as a key reference work for AI researchers and developers, Logical Foundations of Artificial Intelligence is a lucid, rigorous, and

comprehensive account of the fundamentals of artificial intelligence from the standpoint of logic. The first section of the book introduces the logicist approach to AI—discussing the representation of declarative knowledge and featuring an introduction to the process of conceptualization, the syntax and semantics of predicate calculus, and the basics of other declarative representations such as frames and semantic nets. This section also provides a simple but powerful inference procedure, resolution, and shows how it can be used in a reasoning system. The next several chapters discuss nonmonotonic reasoning, induction, and reasoning under uncertainty, broadening the logical approach to deal with the inadequacies of strict logical deduction. The third section introduces modal operators that facilitate representing and reasoning about knowledge. This section also develops the process of writing predicate calculus sentences to the metalevel—to permit sentences about sentences and about reasoning processes. The final three chapters discuss the representation of knowledge about states and actions, planning, and intelligent system architecture. End-of-chapter bibliographic and historical comments provide background and point to other works of interest and research. Each chapter also contains numerous student exercises (with solutions provided in an appendix) to reinforce concepts and challenge the learner. A bibliography and index complete this comprehensive work.

Artificial Intelligence in Asset Management - Söhnke M. Bartram 2020-08-28

Artificial intelligence (AI) has grown in presence in asset management and has revolutionized the sector in many ways. It has improved portfolio management, trading, and risk management practices by increasing efficiency, accuracy, and compliance. In particular, AI techniques help construct portfolios based on more accurate risk and return forecasts and more complex constraints. Trading algorithms use AI to devise novel trading signals and execute trades with lower transaction costs. AI also improves risk modeling and forecasting by generating insights from new data sources. Finally, robo-advisors owe a large part of their success to AI techniques. Yet the use of AI can also create new risks and challenges, such as those resulting from model opacity, complexity, and reliance on data integrity.

Artificial Intelligence Basics - Tom Taulli 2019-08-01

Artificial intelligence touches nearly every part of your day. While you may initially assume that technology such as smart speakers and digital assistants are the extent of it, AI has in fact rapidly become a general-purpose technology, reverberating across industries including transportation, healthcare, financial services, and many more. In our modern era, an understanding of AI and its possibilities for your organization is essential for growth and success. Artificial Intelligence Basics has arrived to equip you with a fundamental, timely grasp of AI and its impact. Author Tom Taulli provides an engaging, non-technical introduction to important concepts such as machine learning, deep learning, natural language processing (NLP), robotics, and more. In addition to guiding you through real-world case studies and practical implementation steps, Taulli uses his expertise to expand on the bigger questions that surround AI. These include societal trends, ethics, and future impact AI will have on world governments, company structures, and daily life. Google, Amazon, Facebook, and similar tech giants are far from the only organizations on which artificial intelligence has had—and will continue to have—an incredibly significant result. AI is the present and the future of your business as well as your home life. Strengthening your prowess on the subject will prove invaluable to your preparation for the future of tech, and Artificial Intelligence Basics is the indispensable guide that you've been seeking. What You Will Learn Study the core principles for AI approaches such as machine learning, deep learning, and NLP (Natural Language Processing) Discover the best practices to successfully implement AI by examining case studies including Uber, Facebook, Waymo, UiPath, and Stitch Fix Understand how AI capabilities for robots can improve business Deploy chatbots and Robotic Processing Automation (RPA) to save costs and improve customer service Avoid costly gotchas Recognize ethical concerns and other risk factors of using artificial intelligence Examine the secular trends and how they may impact your business Who This Book Is For Readers without a technical background, such as managers, looking to understand AI to evaluate solutions.

Artificial Intelligence - David L. Poole 2017-09-25

Artificial Intelligence presents a practical guide to AI, including agents, machine learning and problem-solving simple and complex domains.

Foundations of Business - William M. Pride 2012-01-01

Foundations of Business, 3E gives students the comprehensive preparation they'll need to SUCCEED in today's competitive business world. By providing a brief survey of the major functional areas of business, including management, marketing, accounting, finance, economics, and information technology, this text introduces the reader to core business practices. In addition, the authors address other important concepts such as ethics and social responsibility, forms of ownership, small business and entrepreneurship, and international business. This edition is filled with cutting-edge content, including up-to-date information on the economic crisis, social networking, competition in the global marketplace, and the green movement, as well as suggestions on how to manage a business in the midst of economic ups and downs. All new Inside Business opening cases, new box features, and new end-of-chapter video cases along with an abundance of study aids help both professors and students achieve SUCCESS, the theme of this edition, in the course and beyond. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Platforms and Artificial Intelligence - Ahmed Bounfour 2022-03-28

Artificial intelligence (AI) and platforms are closely related. Most investments in AI, especially in critical technologies, are provided by large platforms. This book describes how platforms invest in AI and how AI will impact the next generation of competences, following a twofold approach to do so: on the one hand, the book seeks to understand how platforms for investment in intangibles and AI are organized, but on the other hand, it provides a framework to describe how AI will change jobs and competences in the future. Moreover, the book addresses five main themes: 1. platforms, platformization, and the foundations of their business models; 2. artificial intelligence, technological tendencies, and the policy agenda; 3. artificial intelligence, productivity, and the next generation of competences; 4. artificial intelligence, productivity, and the digital divide; 5. artificial intelligence, ethics, and the post-truth society. The book's content is mostly based on papers presented at the last two installments of the World Conference on Intellectual Capital for Communities. It brings together the views of leading scholars and experts on how artificial intelligence and platformization will impact competences in the near future.

Business Forecasting - Michael Gilliland 2021-05-11

Discover the role of machine learning and artificial intelligence in business forecasting from some of the brightest minds in the field In Business Forecasting: The Emerging Role of Artificial Intelligence and Machine Learning accomplished authors Michael Gilliland, Len Tashman, and Udo Sglavo deliver relevant and timely insights from some of the most important and influential authors in the field of forecasting. You'll learn about the role played by machine learning and AI in the forecasting process and discover brand-new research, case studies, and thoughtful discussions covering an array of practical topics. The book offers multiple perspectives on issues like monitoring forecast performance, forecasting process, communication and accountability for forecasts, and the use of big data in forecasting. You will find: Discussions on deep learning in forecasting, including current trends and challenges Explorations of neural network-based forecasting strategies A treatment of the future of artificial intelligence in business forecasting Analyses of forecasting methods, including modeling, selection, and monitoring In addition to the Foreword by renowned researchers Spyros Makridakis and Fotios Petropoulos, the book also includes 16 "opinion/editorial" Afterwords by a diverse range of top academics, consultants, vendors, and industry practitioners, each providing their own unique vision of the issues, current state, and future direction of business forecasting. Perfect for financial controllers, chief financial officers, business analysts, forecast analysts, and demand planners, Business Forecasting will also earn a place in the libraries of other executives and managers who seek a one-stop resource to help them critically assess and improve their own organization's forecasting efforts.

Foundations of Data Science for Engineering Problem Solving - Parikshit Narendra Mahalle

This book is one-stop shop which offers essential information one must know and can implement in real-time business expansions to solve engineering problems in various disciplines. It will also help us to make future predictions and decisions using AI algorithms for engineering problems. Machine learning and optimizing techniques provide strong insights into novice users. In the era of big data, there is a need to deal with data science problems in multidisciplinary perspective. In the real world, data comes from various use cases, and there is a need of source specific data science models. Information is drawn from various

platforms, channels, and sectors including web-based media, online business locales, medical services studies, and Internet. To understand the trends in the market, data science can take us through various scenarios. It takes help of artificial intelligence and machine learning techniques to design and optimize the algorithms. Big data modelling and visualization techniques of collected data play a vital role in the field of data science. This book targets the researchers from areas of artificial intelligence, machine learning, data science and big data analytics to look for new techniques in business analytics and applications of artificial intelligence in recent businesses.

Responsible Artificial Intelligence - Virginia Dignum 2019-11-04

In this book, the author examines the ethical implications of Artificial Intelligence systems as they integrate and replace traditional social structures in new sociocognitive-technological environments. She discusses issues related to the integrity of researchers, technologists, and manufacturers as they design, construct, use, and manage artificially intelligent systems; formalisms for reasoning about moral decisions as part of the behavior of artificial autonomous systems such as agents and robots; and design methodologies for social agents based on societal, moral, and legal values. Throughout the book the author discusses related work, conscious of both classical, philosophical treatments of ethical issues and the implications in modern, algorithmic systems, and she combines regular references and footnotes with suggestions for further reading. This short overview is suitable for undergraduate students, in both technical and non-technical courses, and for interested and concerned researchers, practitioners, and citizens.

Foundations of Artificial Intelligence in Healthcare and Bioscience - Louis J. Catania 2020-11-25

Foundational Handbook of Artificial Intelligence in Healthcare and Bioscience: A User Friendly Guide for IT Professionals, Healthcare Providers, Researchers, and Clinicians uses color-coded illustrations to explain AI from its basics to modern technologies. Other sections cover extensive, current literature research and citations regarding AI's role in the business and clinical aspects of health care. The book provides readers with a unique opportunity to appreciate AI technology in practical terms, understand its applications, and realize its profound influence on the clinical and business aspects of health care. Artificial Intelligence is a disruptive technology that is having a profound and growing influence on the business of health care as well as medical diagnosis, treatment, research and clinical delivery. The AI relationships in health care are complex, but understandable, especially when discussed and developed from their foundational elements through to their practical applications in health care. Provides an illustrated, foundational guide and comprehensive descriptions of what Artificial Intelligence is and how it functions Integrates a comprehensive discussion of AI applications in the business of health care Presents in-depth clinical and AI-related discussions on diagnostic medicine, therapeutic medicine, and prevalent disease categories with an emphasis on immunology and genetics, the two categories most influenced by AI Includes comprehensive coverage of a variety of AI treatment applications, including medical/pharmaceutical care, nursing care, stem cell therapies, robotics, and 10 common disease categories with AI applications

Knowledge Graphs for eXplainable Artificial Intelligence: Foundations, Applications and Challenges - I. Tiddi 2020-05-06

The latest advances in Artificial Intelligence and (deep) Machine Learning in particular revealed a major drawback of modern intelligent systems, namely the inability to explain their decisions in a way that humans can easily understand. While eXplainable AI rapidly became an active area of research in response to this need for improved understandability and trustworthiness, the field of Knowledge Representation and Reasoning (KRR) has on the other hand a long-standing tradition in managing information in a symbolic, human-understandable form. This book provides the first comprehensive collection of research contributions on the role of knowledge graphs for eXplainable AI (KG4XAI), and the papers included here present academic and industrial research focused on the theory, methods and implementations of AI systems that use structured knowledge to generate reliable explanations. Introductory material on knowledge graphs is included for those readers with only a minimal background in the field, as well as specific chapters devoted to advanced methods, applications and case-studies that use knowledge graphs as a part of knowledge-based, explainable systems (KBX-systems). The final chapters explore current challenges and future research directions in the area of knowledge graphs for eXplainable AI. The book not only provides a scholarly, state-of-the-art overview of research in this subject area, but also fosters the

hybrid combination of symbolic and subsymbolic AI methods, and will be of interest to all those working in the field.

Artificial Intelligence in Practice - Bernard Marr 2019-04-15

Cyber-solutions to real-world business problems Artificial Intelligence in Practice is a fascinating look into how companies use AI and machine learning to solve problems. Presenting 50 case studies of actual situations, this book demonstrates practical applications to issues faced by businesses around the globe. The rapidly evolving field of artificial intelligence has expanded beyond research labs and computer science departments and made its way into the mainstream business environment. Artificial intelligence and machine learning are cited as the most important modern business trends to drive success. It is used in areas ranging from banking and finance to social media and marketing. This technology continues to provide innovative solutions to businesses of all sizes, sectors and industries. This engaging and topical book explores a wide range of cases illustrating how businesses use AI to boost performance, drive efficiency, analyse market preferences and many others. Best-selling author and renowned AI expert Bernard Marr reveals how machine learning technology is transforming the way companies conduct business. This detailed examination provides an overview of each company, describes the specific problem and explains how AI facilitates resolution. Each case study provides a comprehensive overview, including some technical details as well as key learning summaries: Understand how specific business problems are addressed by innovative machine learning methods Explore how current artificial intelligence applications improve performance and increase efficiency in various situations Expand your knowledge of recent AI advancements in technology Gain insight on the future of AI and its increasing role in business and industry Artificial Intelligence in Practice: How 50 Successful Companies Used Artificial Intelligence to Solve Problems is an insightful and informative exploration of the transformative power of technology in 21st century commerce.

Towards a Code of Ethics for Artificial Intelligence - Paula Boddington 2017-11-09

The author investigates how to produce realistic and workable ethical codes or regulations in this rapidly developing field to address the immediate and realistic longer-term issues facing us. She spells out the key ethical debates concisely, exposing all sides of the arguments, and addresses how codes of ethics or other regulations might feasibly be developed, looking for pitfalls and opportunities, drawing on lessons learned in other fields, and explaining key points of professional ethics. The book provides a useful resource for those aiming to address the ethical challenges of AI research in meaningful and practical ways.

Foundations of Machine Learning, second edition - Mehryar Mohri 2018-12-25

A new edition of a graduate-level machine learning textbook that focuses on the analysis and theory of algorithms. This book is a general introduction to machine learning that can serve as a textbook for graduate students and a reference for researchers. It covers fundamental modern topics in machine learning while providing the theoretical basis and conceptual tools needed for the discussion and justification of algorithms. It also describes several key aspects of the application of these algorithms. The authors aim to present novel theoretical tools and concepts while giving concise proofs even for relatively advanced topics. Foundations of Machine Learning is unique in its focus on the analysis and theory of algorithms. The first four chapters lay the theoretical foundation for what follows; subsequent chapters are mostly self-contained. Topics covered include the Probably Approximately Correct (PAC) learning framework; generalization bounds based on Rademacher complexity and VC-dimension; Support Vector Machines (SVMs); kernel methods; boosting; on-line learning; multi-class classification; ranking; regression; algorithmic stability; dimensionality reduction; learning automata and languages; and reinforcement learning. Each chapter ends with a set of exercises. Appendixes provide additional material including concise probability review. This second edition offers three new chapters, on model selection, maximum entropy models, and conditional entropy models. New material in the appendixes includes a major section on Fenchel duality, expanded coverage of concentration inequalities, and an entirely new entry on information theory. More than half of the exercises are new to this edition.

Understanding Artificial Intelligence - Ralf T. Kreutzer 2019-09-25

Artificial Intelligence (AI) will change the lives of people and businesses more fundamentally than many people can even imagine today. This book illustrates the importance of AI in an era of digitalization. It

introduces the foundations of AI and explains its benefits and challenges for companies and entire industries. In this regard, AI is approached not just as yet another technology, but as a fundamental innovation, which will spread into all areas of the economy and life, and will disrupt business processes and business models in the years to come. In turn, the book assesses the potential that AI holds, and clarifies the framework that is necessary for pursuing a responsible approach to AI. In a series of best-practice cases, the book subsequently highlights a broad range of sectors and industries, from production to services; from customer service to marketing and sales; and in industries like retail, health care, energy, transportation and many more. In closing, a dedicated chapter outlines a roadmap for a specific corporate AI journey. No one can ignore intensive work with AI today - neither as a private person, let alone as a top performer in companies. This book offers a thorough, carefully crafted, and easy to understand entry into the field of AI. The central terms used in the AI context are given a very good explanation. In addition, a number of cases show what AI can do today and where the journey is heading. An important book that you should not miss! Professor Dr. Harley Krohmer University of Bern "Inspiring, thought provoking and comprehensive, this book is wittingly designed to be a catalyst for your individual and corporate AI journey." Avo Schönbohm, Professor at the Berlin School of Economics and Law, Enterprise Game Designer at LUDEO and Business Punk

Handbook of Research on Foundations and Applications of Intelligent Business Analytics - Zhaohao Sun 2021

"This book addresses research issues by investigating into foundations, technologies, and applications of intelligent business analytics, offering theoretical foundations, technologies, methodologies, and applications of intelligent business analytics in an integrated way"--

Artificial Intelligence for Business - Doug Rose 2020-07-31

Millions of non-technical professionals and leaders want to understand Artificial Intelligence (AI) and Machine Learning (ML) -- whether to improve their businesses, be more effective citizens, consumers or policymakers, or just out of sheer curiosity. Until now, most books on the subject have either been too complicated and mathematical, or have simply avoided the big picture by focusing on the use of specific software libraries. In *Artificial Intelligence for Business*, Doug Rose bridges the gap, offering today's most accessible and useful introduction to AI and ML technologies -- and what they can and can't do. Rose begins by tracing AI's evolution from the early 1950s to the present, illuminating core ideas that still drive its development. Next, he explores recent innovations that have reinvigorated the field by providing the "big data" that makes machine learning so powerful - innovations such as GPS, social media and electronic transactions. Finally, he explains how today's machines learn by combining powerful processing, advanced algorithms, and artificial neural networks that mimic the human brain. Throughout, he illustrates key concepts with practical examples that help you connect AI, ML, and neural networks to specific problems and solutions. Step by step, he systematically demystifies these powerful technologies, removing the fear, bewilderment, and advanced math -- so you can understand the new possibilities they create, and start using them.

It's All Analytics! - Scott Burk 2020

Explainable AI: Foundations, Methodologies and Applications - Mayuri Mehta 2022-10-19

This book presents an overview and several applications of explainable artificial intelligence (XAI). It covers different aspects related to explainable artificial intelligence, such as the need to make the AI models interpretable, how black box machine/deep learning models can be understood using various XAI methods, different evaluation metrics for XAI, human-centered explainable AI, and applications of explainable AI in health care, security surveillance, transportation, among other areas. The book is suitable for students and academics aiming to build up their background on explainable AI and can guide them in making machine/deep learning models more transparent. The book can be used as a reference book for teaching a graduate course on artificial intelligence, applied machine learning, or neural networks. Researchers working in the area of AI can use this book to discover the recent developments in XAI. Besides its use in academia, this book could be used by practitioners in AI industries, healthcare industries, medicine, autonomous vehicles, and security surveillance, who would like to develop AI techniques and applications

with explanations.

Data Science for Business 2019 (2 BOOKS IN 1) - Riley Adams 2019-05-12

☐This book includes 2 Manuscripts☐ Are you looking for new ways to grow your business, with resources you already have? Do you want to know how the big players like Netflix, Amazon, or Shopify use data analytics to MULTIPLY their growth? Keep listening to learn how to use data analytics to maximize YOUR business.

Artificial Intelligence and Machine Learning in Business Management - Sandeep Kumar Panda 2021-11-05
Artificial Intelligence and Machine Learning in Business Management The focus of this book is to introduce artificial intelligence (AI) and machine learning (ML) technologies into the context of business management. The book gives insights into the implementation and impact of AI and ML to business leaders, managers, technology developers, and implementers. With the maturing use of AI or ML in the field of business intelligence, this book examines several projects with innovative uses of AI beyond data organization and access. It follows the Predictive Modeling Toolkit for providing new insight on how to use improved AI tools in the field of business. It explores cultural heritage values and risk assessments for mitigation and conservation and discusses on-shore and off-shore technological capabilities with spatial tools for addressing marketing and retail strategies, and insurance and healthcare systems. Taking a multidisciplinary approach for using AI, this book provides a single comprehensive reference resource for undergraduate, graduate, business professionals, and related disciplines.

Artificial Intelligence - Brian Thomas Lenahan 2019-05-06

Artificial Intelligence is everywhere. This book goes beyond merely a definition of Artificial Intelligence, delving into a discussion of strategies, tools, vendors, and trends to ensure, as a consultant and/or business leader, you are competitive in 2019 and beyond. *Artificial Intelligence: Foundations for Business Leaders & Consultants* illustrates how to successfully embed artificial intelligence in yours or your client's organization through a simple view of a complex topic to enabling readers to leverage AI for competitive advantage. The goal of AI shouldn't be to replace human interaction but to improve human interaction and take human capabilities to the next level. The best way organizations can equip themselves for the accelerating onslaught of AI and machine learning systems is to learn to partner with them. And that's what *Artificial Intelligence: Foundations for Business Leaders & Consultants* teaches. As an executive in a Top 10 North American financial institution, I witnessed the evolution of artificial intelligence within a large corporate environment. In our case, we were addressing the ever-increasing challenge of cybercrime through the analysis of Big Data, Machine Learning, and fraud identification techniques. Each of these is a component of the artificial intelligence world. From the first approaches to artificial intelligence by Alan Turing and contemporaries in the 1950s, through a series of so-called "AI winters", to today's world of robotics, availability of data, efficient algorithms, adequate computing power, and availability of funding, company leaders have watched the evolution; today businesses of all sizes can take advantage of artificial intelligence. The challenge today for organizations is not simply awareness of technology changes including AI; it's that the pace of the change is accelerating exponentially. *Artificial Intelligence: Foundations for Business Leaders & Consultants* will direct your efforts in a way that allows you and your organization to keep pace. Whether the dominant issue in your organization is expensive operations, ineffective use of resources, challenging data analysis, a less than satisfactory customer experience or some other issue, artificial intelligence tools exist today to assist. The future holds even greater opportunities for AI; opportunities to support human interaction, and of course consultant, business leader, and organizational success. This book is divided into seventeen chapters: 1. What is Artificial Intelligence? 2. A Brief History of Artificial Intelligence 3. The World of Digital Disruption 4. How Fast Are Things Changing? 5. Consulting Strategies, Tools, Tips & Tactics 6. Optimum Speed 7. The People Side of AI 8. How Can Your Clients Leverage AI 9. Data, Data, Data 10. The "Joy" of Failure 11. The CEO/Business Owner in 2020 12. Funding Digital Transformation 13. Industry Review - Construction and AI 14. The Board, Regulations & Privacy 15. How Buying is Changing in 2019 16. The Future 17. Conclusion

Applied Artificial Intelligence in Business - Leong Chan 2022

This book offers students an introduction to the concepts of big data and artificial intelligence (AI) and their applications in the business world. It answers questions such as what are the main concepts of artificial

intelligence and big data? What applications for artificial intelligence and big data analytics are used in the business field? It offers application-oriented overviews and cases from different sectors and fields to help readers discover and gain useful insights. Each chapter features discussion questions and summaries. To assist professors in teaching, the book supplementary materials will include answers to questions, and presentation slides.

Artificial Intelligence Foundations - Andrew Lowe 2020-08-24

In line with the BCS AI Foundation and Essentials certificates, this book guides you through the world of AI. You will learn how AI is being utilised today, and how it is likely to be used in the future. You will explore robotics and machine learning within the context of AI, and discover how the challenges AI presents are being addressed.

Handbook of Artificial Intelligence for Music - Eduardo Reck Miranda 2021-07-02

This book presents comprehensive coverage of the latest advances in research into enabling machines to listen to and compose new music. It includes chapters introducing what we know about human musical intelligence and on how this knowledge can be simulated with AI. The development of interactive musical robots and emerging new approaches to AI-based musical creativity are also introduced, including brain-computer music interfaces, bio-processors and quantum computing. Artificial Intelligence (AI) technology permeates the music industry, from management systems for recording studios to recommendation systems for online commercialization of music through the Internet. Yet whereas AI for online music distribution is well advanced, this book focuses on a largely unexplored application: AI for creating the actual musical content.

Foundations of Business - William Pride 2010-01-01

Foundations of Business, 2nd Edition provides a brief survey of the major functional areas of business including management, marketing, accounting, finance, and information technology, as well as core topics such as ethics and social responsibility, forms of ownership, small business, and international business. The

text is filled with cutting edge content, including up-to-date information about the economic crisis as well as suggestions on how to manage personal financial planning in the midst of economic ups and downs. This second edition also includes two new appendices on Careers in Business and Personal Finance. An abundance of study aids is also available within the text and on the student companion website. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Competing in the Age of AI - Marco Iansiti 2020-01-07

"a provocative new book" — The New York Times AI-centric organizations exhibit a new operating architecture, redefining how they create, capture, share, and deliver value. Now with a new preface that explores how the coronavirus crisis compelled organizations such as Massachusetts General Hospital, Verizon, and IKEA to transform themselves with remarkable speed, Marco Iansiti and Karim R. Lakhani show how reinventing the firm around data, analytics, and AI removes traditional constraints on scale, scope, and learning that have restricted business growth for hundreds of years. From Airbnb to Ant Financial, Microsoft to Amazon, research shows how AI-driven processes are vastly more scalable than traditional processes, allow massive scope increase, enabling companies to straddle industry boundaries, and create powerful opportunities for learning—to drive ever more accurate, complex, and sophisticated predictions. When traditional operating constraints are removed, strategy becomes a whole new game, one whose rules and likely outcomes this book will make clear. Iansiti and Lakhani: Present a framework for rethinking business and operating models Explain how "collisions" between AI-driven/digital and traditional/analog firms are reshaping competition, altering the structure of our economy, and forcing traditional companies to rearchitect their operating models Explain the opportunities and risks created by digital firms Describe the new challenges and responsibilities for the leaders of both digital and traditional firms Packed with examples—including many from the most powerful and innovative global, AI-driven competitors—and based on research in hundreds of firms across many sectors, this is your essential guide for rethinking how your firm competes and operates in the era of AI.