Rpa Ai Summit Intelligent Automation Week 2018

Enterprise Artificial Intelligence Transformation AI is everywhere. From doctor's offices to cars and even refrigerators, AI technology is quickly infiltrating our daily lives. AI has the ability to transform simple tasks into technological feats at a human level. This will change the world, plain and simple. That's why AI mastery is such a sought-after skill for tech professionals. Author Rashed Haq is a subject matter expert on AI, having developed AI and data science strategies, platforms, and applications for Publicis Sapient's clients for over 10 years. He shares that expertise in the new book, Enterprise Artificial Intelligence Transformation. The first of its kind, this book grants technology leaders the insight to create and scale their AI capabilities and bring their companies into the new generation of technology. As AI continues to grow into a necessary feature for many businesses, more and more leaders are interested in harnessing the technology within their own organizations. In this new book, leaders will learn to master AI fundamentals, grow their career opportunities, and gain confidence in machine learning. Enterprise Artificial Intelligence Transformation covers a wide range of topics, including: Real-world AI use cases and examples Machine learning, deep learning, and slimantic modeling Risk management of AI models AI strategies for development and expansion AI Center of Excellence creating and management If you're an industry, business, or technology professional that wants to attain the skills needed to grow your machine learning capabilities and effectively scale the work you're already doing, you'll find what you need in Enterprise Artificial Intelligence Transformation.

This book is intended to help management and other interested parties such as engineers, to understand the state of the art when it comes to the intersection between AI and Industry 4.0 and get them to realise the huge possibilities which can be unleashed by the intersection of these two fields. We have heard a lot about Industry 4.0, but most of the time, it focuses mainly on automation. In this book, the authors are going a step further by exploring advanced applications of Artificial Intelligence (AI) techniques, ranging from the use of deep learning algorithms in order to make predictions, up to an implementation of a full-blown Digital Triplet system. The scope of the book is to showcase what is currently brewing in the labs with the hope of migrating these technologies towards the factory floors. Chairpersons and CEOs must read these papers if they want to stay at the forefront of the game, ahead of their competition, while also saving huge sums of money in the process.

This three-volume set of books highlights major advances in the development of concepts and techniques in the area of new technologies and architectures of contemporary information systems. Further, it helps readers solve specific research and analytical problems and glean useful knowledge and business value from the data. Each chapter provides an analysis of a specific technical problem, followed by a numerical analysis, simulation and implementation of the

solution to the real-life problem. Managing an organisation, especially in today's rapidly changing circumstances, is a very complex process. Increased competition in the marketplace, especially as a result of the massive and successful entry of foreign businesses into domestic markets, changes in consumer behaviour, and broader access to new technologies and information, calls for organisational restructuring and the introduction and modification of management methods using the latest advances in science. This situation has prompted many decision-making bodies to introduce computer modelling of organisation management systems. The three books present the peer-reviewed proceedings of the 39th International Conference "Information Systems Architecture and Technology" (ISAT), held on September 16–18, 2018 in Nysa, Poland. The conference was organised by the Computer Science and Management Systems Departments, Faculty of Computer Science and Management, Wroclaw University of Technology and Sciences and University of Applied Sciences in Nysa, Poland. The papers have been grouped into three major parts: Part I–discusses topics including but not limited to Artificial Intelligence Methods, Knowledge Discovery and Data Mining, Big Data, Knowledge Based Management, Internet of Things, Cloud Computing and High Performance Computing, Distributed Computer Systems, Content Delivery Networks, and Service Oriented Computing. Part II–addresses topics including but not limited to System Modelling for Control, Recognition and Decision Support, Mathematical Modelling in Computer System Design, Service Oriented Systems and Cloud Computing, and Complex Process Modelling. Part III–focuses on topics including but not limited to Knowledge Based Management, Modelling of Financial and Investment Decisions, Modelling of Managerial Decisions, Production Systems Management and Maintenance, Risk Management, Small Business Management, and Theories and Models of Innovation.

"A concise, insightful and sophisticated guide to maintaining humane values in an age of new machines."—The New York Times Book Review "While we need to rewrite the rules of the twenty-first-century economy, Kevin's book is a great look at how people can do this on a personal level to always put humanity first."—Andrew Yang You are being automated. After decades of hype and sci-fi fantasies, artificial intelligence is leaping out of research labs and into the center of our lives. Automation doesn't just threaten our jobs. It shapes our entire human experience, with AI and algorithms influencing the TV shows we watch, the music we listen to, the beliefs we hold, and the relationships we form. And while the age-old debate over whether automation will destroy jobs rages on, an even more important question is being ignored: How can we be happy, successful humans in a world that is increasingly built by and for machines? In Futureproof: 9 Rules for Humans in the Age of Automation, New York Times technology columnist Kevin Roose lays out a hopeful, pragmatic vision for how we can thrive in the age of AI and automation. He shares the secrets of people and organizations that have survived previous waves of technological change,

and explains what skills are necessary to stay ahead of today□s intelligent machines, with lessons like □ Be surprising, social, and scarce. □ Resist machine drift. □ Leave handprints. □ Demote your devices. □ Treat AI like a chimp army. Roose rejects the conventional wisdom that in order to succeed in the AI age, we have to become more like machines ourselves□hyper-efficient, data-driven workhorses. Instead, he says, we should focus on being more human, and doing the kinds of creative, inspiring, and meaningful things even the most advanced robots can□t do.

Part III

Multiple Perspectives in Risk and Risk Management

Handbook of Research on Artificial Intelligence in Human Resource Management

INTELLIGENT AUTOMATION

9 Rules for Humans in the Age of Automation

SPIoT-2021 Volume 2

ECIAIR 2021 3rd European Conference on the Impact of Artificial Intelligence and Robotics

Advances in Artificial Intelligence (AI) technology have opened up new markets and new opportunities for progress in critical areas such as health, education, energy, and the environment. In recent years, machines have surpassed humans in the performance of certain specific tasks, such as some aspects of image recognition. Experts forecast that rapid progress in the field of specialized artificial intelligence will continue. Although it is very unlikely that machines will exhibit broadly-applicable intelligence comparable to or exceeding that of humans in the next 20 years, it is to be expected that machines will reach and exceed human performance on more and more tasks. As a contribution toward preparing the United States for a future in which AI plays a growing role, this report surveys the current state of AI, its existing and potential applications, and the questions that are raised for society and public policy by progress in AI. The report also makes recommendations for specific further actions by Federal agencies and other actors.

While Robotic Process Automation (RPA) has been around for about 20 years, it has hit an inflection point because of the convergence of cloud computing, big data and AI. This book shows you how to leverage RPA effectively in your company to automate repetitive and rules-based processes, such as scheduling, inputting/transferring data, cut and paste, filling out forms, and search. Using practical aspects of implementing the technology (based on case studies and industry best practices), you'll see how companies have been able to realize substantial ROI (Return On Investment) with their implementations, such as by lessening the need for hiring or outsourcing. By understanding the core concepts of RPA, you'll also see that the technology significantly increases compliance – leading to fewer issues with regulations – and minimizes costly errors. RPA software revenues have recently soared by over 60 percent, which is the fastest ramp in the tech industry, and they are expected to exceed $1 billion by the end of 2019. It is generally seamless with legacy IT environments, making it easier for companies to pursue a strategy of digital transformation and can even be a gateway to

AI. The Robotic Process Automation Handbook puts everything you need to know into one place to be a part of this wave. What You'll Learn Develop the right strategy and plan Deal with resistance and fears from employees Take an in-depth look at the leading RPA systems, including where they are most effective, the risks and the costs Evaluate an RPA system Who This Book Is For IT specialists and managers at mid-to-large companies

This book constitutes the proceedings of the Blockchain and Robotic Process Automation (RPA) Forum which was held as part of the 18th International Conference on Business Process Management, BPM 2020. The conference was planned to take place in Seville, Spain, in September 2020. Due to the COVID-19 pandemic the conference took place virtually. The Blockchain Forum and the RPA Forum have in common that they are centered around an emerging and exciting technology. The blockchain is a sophisticated distributed ledger technology, while RPA software allows for mimicking human, repetitive actions. Each of these have the potential to fundamentally change how business processes are being orchestrated and executed in practice. The BPM community has embraced these technologies as objects of analysis, design, development, and evaluation. The 14 full plus one short paper presented in this volume were carefully reviewed and selected from a total of 28 submissions.

From the global automation leaders at Accenture—the first-ever comprehensive blueprint for how to use and scale AI-powered intelligent automation in the enterprise to gain competitive advantage through faster speed to market, improved product quality, higher efficiency, and an elevated customer experience. Many companies were already implementing limited levels of automation when the pandemic hit. But the need to rapidly change business processes and how organizations work resulted in the compression of a decade's worth of digital transformation into a matter of months. Technology suddenly became the essential element for rapid organizational change and the creation of 360-degree value benefiting all stakeholders. Businesses are faced with the imperative to embrace that change or risk being left behind. In The Automation Advantage, global enterprise technology and automation veterans Bhaskar Ghosh, Rajendra Prasad, and Gayathri Pallail give business leaders and managers the action plan they need to execute a strategic agenda that enables them to quickly and confidently scale their automation and AI initiatives. This practical and highly accessible implementation guide answers leaders' burning questions, such as: How do I identify and prioritize automation opportunities? How do I assess my legacy systems and data issues? How do I derive full value out of my technology investments and automation efforts? How can I inspire my employees to embrace change and the new opportunities presented by automation? The Automation Advantage goes beyond optimizing process to using AI to transform almost any business activity in any industry to make it faster, more streamlined, cost efficient, and customer-focused—vastly improving overall productivity and performance. Featuring case studies of successful automation solutions, this indispensable road map includes guiding principles for technology, governance, culture, and leadership change. It offers a human-centric approach to AI and automation that leads to sustainable transformation and

measurable business results.
How to Alleviate Digital Transformation Debt
Virtual Humans
The Robotic Process Automation Handbook
Proceedings of ICCIS 2020
BPM 2021 Blockchain and RPA Forum, Rome, Italy, September 6–10, 2021,
Proceedings
Hyperautomation
Your Pocket Guide to the World of Artificial Intelligence

Assuming no prior knowledge or technical skills, Getting Started with Business Analytics: Insightful Decision-Making explores the contents, capabilities, and applications of business analytics. It bridges the worlds of business and statistics and describes business analytics from a non-commercial standpoint. The authors demystify the main concepts and terminologies and give many examples of real-world applications. The first part of the book introduces business data and recent technologies that have promoted fact-based decision-making. The authors look at how business intelligence differs from business analytics. They also discuss the main components of a business analytics application and the various requirements for integrating business with analytics. The second part presents the technologies underlying business analytics: data mining and data analytics. The book helps you understand the key concepts and ideas behind data mining and shows how data mining has expanded into data analytics when considering new types of data such as network and text data. The third part explores business analytics in depth, covering customer, social, and operational analytics. Each chapter in this part incorporates hands-on projects based on publicly available data. Helping you make sound decisions based on hard data, this self-contained guide provides an integrated framework for data mining in business analytics. It takes you on a journey through this data-rich world, showing you how to deploy business analytics solutions in your organization. Virtual Humans provides a much-needed definition of what constitutes a 'virtual human' and places virtual humans within the wider context of Artificial Intelligence development. It explores the technical approaches to creating a virtual human, as well as emergent issues such as embodiment, identity, agency and digital immortality, and the resulting ethical challenges. The book presents an overview of current research and practice in this area, and outlines the major challenges faced by today's developers and researchers. The book examines the possibility for using virtual humans in a variety of roles, from personal assistants to teaching, coaching and knowledge management, and the book situates these discussions around familiar applications (e.g. Siri, Cortana, Alexa) and the portrayal of virtual humans within Science Fiction. Features Presents a comprehensive overview of this rapidly developing field Provides an array of relevant, real-life examples from expert practitioners and researchers from around the globe in how to create the avatar body, mind, senses and ability to communicate Intends to be broad in scope yet practical in approach, so that it can serve the needs of several different audiences, including researchers, teachers, developers and anyone with an interest in where these technologies might take us Covers a wide variety of issues which have been neglected in other research texts; for example, definitions and taxonomies, the ethical challenges of virtual humans and issues around digital immortality Includes numerous examples and extensive references

This proceedings volume presents a selection of the best papers from the 14th International Conference on Business Excellence, Business Revolution in the Digital Era (ICBE 2020), held in Bucharest, Romania. The respective papers share the latest findings and perspectives on innovation

in a turbulent business environment, and on improvements in economic, societal and technological structures and processes to help reach major sustainability goals.

There are many myths and mistakes which make the topics of artificial intelligence complex and confusing. But the truth is that the foundations of AI are not rocket science. People do not need a PhD to understand how a basic neural network works. In fact, one does not even need computer skills to learn this. Cunning Machines: Your Pocket Guide to the World of Artificial Intelligence explains the main concepts: what does AI really mean, where do we find it, how do scientists try to evaluate it, what are its main limitations and what future we can expect with it? It also describes the most popular AI techniques in an easy-to-digest form: Artificial neural networks Genetic algorithms The Monte Carlo method Natural language processing Ontologies and their applications This book is for everyone. Still, it may be especially valuable to teachers who wish to enrich their classes with some interesting and popular topics, sales managers and business analysts who wish to better understand the IT world, and finally politicians and journalists who take part in debates on the latest technologies. J   drzej Osi   ski earned a PhD in artificial intelligence, has worked on government grants and has published 14 scientific papers to date. He is also the co-author of two books. At the same time, he has over ten years of experience working in IT companies of different sizes, domains (the web, telecoms, banking, e-learning), organisation structures and locations (Poland, Ireland and the UK). He is also involved in various initiatives promoting AI, science and modern technologies including blog posts, invited talks and TV and radio appearances

Build real-world RPA solutions using UiPath and Automation Anywhere

14th International Conference on Business Excellence, ICBE 2020, Bucharest, Romania

Cunning Machines

Management, Technology, Applications

Select Proceedings of AISE 2020, Volume 1

Business Process Management: Blockchain and Robotic Process Automation Forum

Transforming Management Using Artificial Intelligence Techniques

This book highlights recent research on intelligent systems and natu inspired computing. It presents 130 selected papers from the 19th International Conference on Intelligent Systems Design and Applicati (ISDA 2020), which was held online. The ISDA is a premier conferenc the field of computational intelligence, and the latest installment bro together researchers, engineers and practitioners whose work invol intelligent systems and their applications in industry. Including contributions by authors from 40 countries, the book offers a valua reference guide for all researchers, students and practitioners in the of Computer Science and Engineering.

This cutting-edge Handbook offers a comprehensive introduction to emerging research field of artificial intelligence (AI) in human resour management (HRM). Broadly mapping AI fields relevant for HR, it not considers the more well-known areas of machine learning and natur language processing, but also lesser-known fields such as affective computing and robotic process automation.

Sustainability and mobile computing embraces a wide range of Inform and Communication Technologies [ICT] in recent times. This book foc more on the recent research and development works in almost all th

facets of sustainable, ubiquitous computing and communication para
The recent research efforts on this evolving paradigm help to advan
technologies for next-generation, where socio-economic growth and
sustainability poses significant challenges to the computing and
communication infrastructures. The main purpose of this book is to
promote the technical advances and impacts of sustainability and m
computing to the informatics research. The key strands of this book
include green computing, predictive models, mobility, data analytics,
mobile computing, optimization, Quality of Service [QoS], new
communicating and computing frameworks, human computer interac
Artificial Intelligence [AI], communication networks, risk management
Ubiquitous computing, robotics, smart city and applications. The boo
also addressed myriad of sustainability challenges in various computi
and information processing infrastructures.
This book comprises select papers from the International Conference
Artificial Intelligence and Sustainable Engineering (AISE 2020). The vo
focuses on the recent advancements in artificial intelligence and add
how it is useful in achieving truly sustainable solutions. The key stra
this book include artificial intelligence in healthcare, IoT for modern l
security and surveillance, big data analytics, machine learning and
computing, communication technologies, gesture technology, virtual
intelligence, and audio & speech processing. The book addresses
sustainability challenges in various computing techniques and
opportunities for sustainable engineering based on AI and supporting
such as engineering design for sustainable development using IoT/AI,
smart cities: waste minimization, remanufacturing, reuse and recyclin
technologies using IoT/AI, industry 4.0, intelligent and smart grid sys
energy conservation using technology, green engineering/technology
robotic process automation (RPA) and water and air quality managem
This book can be a valuable resource for academicians, researchers,
professionals working in AI and its applications.
The 2021 International Conference on Machine Learning and Big Dat
Analytics for IoT Security and Privacy
Artificial Intelligence for a Sustainable Industry 4.0
Automate the Boring Stuff with Python, 2nd Edition
20th International Conference on Intelligent Systems Design and
Applications (ISDA 2020) held December 12-15, 2020
ICMCSI 2020
Future Telco
Detecting Regime Change in Computational Finance
2020 - the year of the COVID-19 pandemic - changed everything.
Its ripple effects will be felt for many years to come. At the
same time there have been incredible advances in digitization.

We are amid a digital revolution with unprecedented innovations. The pandemic has accelerated the requirements for "Digital Transformation." Organizations need to adopt and transform to survive and hopefully thrive. At the core of digitization there is very much an underlying principle of "debt." It comes originally from what Is called "technical debt." Simply, technical debt "reflects the implied cost of additional rework caused by choosing an easy solution now instead of using a better approach that would take longer." Difficult transformative choices need to be made now - especially post-COVID-19. If an organization ignores digital transformation for "easy solutions", the "debt" accumulates and can have disastrous consequences. The pandemic has accelerated the accumulation of digital transformation debt! It has also provided an opportunity to thrive in the post-COVID-19 era. What does Digital Transformation mean? What are the opportunities? What are the core digital technologies? What are the best practices? What are practical recommendations to alleviate the Digital Transformation Debt!? This book addresses Digital Transformation Debt holistically and makes recommendations on how to alleviate the debt.

Transforming Management Using Artificial Intelligence Techniques redefines management practices using artificial intelligence (AI) by providing a new approach. It offers a detailed, well-illustrated treatment of each topic with examples and case studies, and brings the exciting field to life by presenting a substantial and robust introduction to AI in a clear and concise manner. It provides a deeper understanding of how the relevant aspects of AI impact each other's efficacy for better output. It's a reliable and accessible one-step resource that introduces AI; presents a full examination of applications; provides an understanding of the foundations; examines education powered by AI, entertainment, home and service robots, healthcare re-imagined, predictive policing, space exploration; and so much more, all within the realm of AI. This book will feature: Uncovering new and innovative features of AI and how it can help in raising economic efficiency at both micro- and macro levels Both the literature and practical aspects of AI and its uses This book summarizing key concepts at the end of each chapter to assist reader comprehension Case studies of tried and tested approaches to resolutions of typical problems Ideal for both teaching and general-knowledge purposes. This book will also simply provide the topic of AI for the readers, aspiring researchers and practitioners involved in management and computer science, so they can obtain a high-level of understanding of AI and managerial applications.

This book gathers selected research papers presented at the International Conference on Communication and Intelligent Systems (ICCIS 2020), organized jointly by Birla Institute of Applied Sciences, Uttarakhand, and Soft Computing Research Society during 26–27 December 2020. This book presents a collection of state-of-the-art research work involving cutting-edge technologies for communication and intelligent systems. Over the past few years, advances in artificial intelligence and machine learning have sparked new research efforts around the globe, which explore novel ways of developing intelligent systems and smart communication technologies. The book presents single- and multi-disciplinary research on these themes in order to make the latest results available in a single, readily accessible source.

This book constitutes revised selected papers from the 12th international Global Sourcing Workshop 2018, held in La Thuile, Italy, in February 2018. The 9 contributions included were carefully reviewed and selected from 40 submissions. The book offers a review of the key topics in sourcing of services, populated with practical frameworks that serve as a tool kit to students and managers. The range of topics covered in this book is wide and diverse, offering micro and macro perspectives on successful sourcing of services. Case studies from various organizations, industries and countries are used extensively throughout the book, giving it a unique position within the current literature offering.

Futureproof

Proceedings of the 18th International Conference on Manufacturing Research, Incorporating the 35th National Conference on Manufacturing Research, 7-10 September 2021, University of Derby, Derby, UK

Invisible Robots in the Quiet of the Night

Preparing for the Future of Artificial Intelligence

Proceedings of First Global Conference on Artificial Intelligence and Applications (GCAIA 2020)

International Conference on Artificial Intelligence and Sustainable Engineering

Practical Programming for Total Beginners

Robotic Process Automation helps businesses to automate systems to reduce human efforts for tasks that are monotonous and can be performed by machines. This project based guide expands on the RPA principles and helps you build automation solutions for the real world using the most popular RPA tools - UiPath and Automation Anywhere Cloud.

If you watched Super Bowl LIII in 2019, you saw no fewer than 10 commercials featuring robots. They were eating hot dogs at baseball games and crashing down roadways, shiny heads glinting in the sun. But these aren't the robots that will take the most jobs. Software running in obscure data centers that no one will ever see

will replace or transform the jobs of cubicle workers, coordinators, and even knowledge workers. This book tells you about them, what jobs they'll take and when, and what we can do about it. Interviews with everyday workers bring the unvarnished reality of advancing automation, with all its ragged edges, to life. An actionable future-of-work model can prepare businesses, governments, and individuals for a rapidly changing workplace.

Artificial Intelligence for Future Generation Robotics offers a vision for potential future robotics applications for AI technologies. Each chapter includes theory and mathematics to stimulate novel research directions based on the state-of-the-art in AI and smart robotics. Organized by application into ten chapters, this book offers a practical tool for researchers and engineers looking for new avenues and use-cases that combine AI with smart robotics. As we witness exponential growth in automation and the rapid advancement of underpinning technologies, such as ubiquitous computing, sensing, intelligent data processing, mobile computing and context aware applications, this book is an ideal resource for future innovation. Brings AI and smart robotics into imaginative, technically-informed dialogue Integrates fundamentals with real-world applications Presents potential applications for AI in smart robotics by use-case Gives detailed theory and mathematical calculations for each application Stimulates new thinking and research in applying AI to robotics

This book examines the extensive changes in markets, technologies and value chains that telecommunication companies are currently confronted with. It analyzes the crossroads they have reached and the choices that now need to be made – to be a bit pipe or a trendsetter of digitalization. Based on an analysis of the key challenges for telcos, the book derives future market scenarios and puts forward recommendations for how they can successfully position themselves. It proposes a framework based on seven "levers," which addresses concrete measures in each step of the value chain, ranging from technology, IT and processes, to innovation, marketing and sales issues. The book discusses the current challenges and provides both general recommendations and concrete solutions. Respected experts illustrate innovative strategic and technical trends and provide insights gained in real-life transformation projects. Recent developments in the areas of regulation, product development, competition between over-the-top (OTT) providers and telcos, as well as technical innovations like 5G, SDN/NFV, LEO satellites and MEC are discussed. Accordingly, practitioners, managers and researchers alike will benefit from the book's wealth of examples and up-to-date insights.

A Guide to Implementing RPA Systems
Data Science, Machine Learning and Algorithmic Trading
Artificial Intelligence in Industry 4.0
International Conference on Mobile Computing and Sustainable Informatics
BPM 2020 Blockchain and RPA Forum, Seville, Spain, September 13–18, 2020, Proceedings
Advances in Manufacturing Technology XXXIV
ERRN 8th European Risk Conference 2018, Katowice, Poland, September 20-21

This is the first book of its kind to build on the framework of Directional Change. The concept of Directional Change opens a whole new area of research. – From the Foreword by Dr Richard Olsen, Founder and CEO of Lykke, Co-founder of OANDA and pioneer in high-frequency finance and fintech A creative start at a novel and difficult problem for investors large and small. – Professor M. A. H.

Dempster, University of Cambridge and Cambridge Systems Associates Limited Financial markets technology and the practice of trading are in a state of constant change. A book that details a completely new concept in trading, however, is very rare. This is one such book, and the authors should be applauded for producing this exciting new work. The concept and framework of Directional Change in prices is an area of research with much promise! – Dr David Norman, Founder of TTC Institute and author This book shows how AI could be a game-changer in finance. – Dr Amadeo Alentorn, Head of Research/Fund Manager at Merian Global Investors Based on interdisciplinary research into "Directional Change", a new data-driven approach to financial data analysis, Detecting Regime Change in Computational Finance: Data Science, Machine Learning and Algorithmic Trading applies machine learning to financial market monitoring and algorithmic trading. Directional Change is a new way of summarising price changes in the market. Instead of sampling prices at fixed intervals (such as daily closing in time series), it samples prices when the market changes direction ("zigzags"). By sampling data in a different way, this book lays out concepts which enable the extraction of information that other market participants may not be able to see. The book includes a Foreword by Richard Olsen and explores the following topics: Data science: as an alternative to time series, price movements in a market can be summarised as directional changes Machine learning for regime change detection: historical regime changes in a market can be discovered by a Hidden Markov Model Regime characterisation: normal and abnormal regimes in historical data can be characterised using indicators defined under Directional Change Market Monitoring: by using historical characteristics of normal and abnormal regimes, one can monitor the market to detect whether the market regime has changed Algorithmic trading: regime tracking information can help us to design trading algorithms It will be of great interest to researchers in computational finance, machine learning and data science. About the Authors Jun Chen received his PhD in computational finance from the Centre for Computational Finance and Economic Agents, University of Essex in 2019. Edward P K Tsang is an Emeritus Professor at the University of Essex, where he co-founded the Centre for Computational Finance and Economic Agents in 2002.

President Putin's explicit declaration that the country that makes progress in artificial intelligence will rule the world has launched a new race for dominance. In this era of cognitive competition and total automation, every country understands that it must rapidly adopt AI or go bust. To stay competitive a country must have a strategy. But how should a government proceed? What areas it must focus on? Where should it even start? This book provides answers to these important, yet pertinent, questions and more. Presenting the viewpoints of global experts and thought leaders on key issues relating to AI and government policies, this book directs us to the future.

The second edition of this best-selling Python book (over 500,000 copies sold!) uses Python 3 to teach even the technically uninclined how to write programs that do in minutes what would take hours to do by hand. There is no prior programming experience required and the book is loved by liberal arts majors

and geeks alike. If you've ever spent hours renaming files or updating hundreds of spreadsheet cells, you know how tedious tasks like these can be. But what if you could have your computer do them for you? In this fully revised second edition of the best-selling classic Automate the Boring Stuff with Python, you'll learn how to use Python to write programs that do in minutes what would take you hours to do by hand--no prior programming experience required. You'll learn the basics of Python and explore Python's rich library of modules for performing specific tasks, like scraping data off websites, reading PDF and Word documents, and automating clicking and typing tasks. The second edition of this international fan favorite includes a brand-new chapter on input validation, as well as tutorials on automating Gmail and Google Sheets, plus tips on automatically updating CSV files. You'll learn how to create programs that effortlessly perform useful feats of automation to: • Search for text in a file or across multiple files • Create, update, move, and rename files and folders • Search the Web and download online content • Update and format data in Excel spreadsheets of any size • Split, merge, watermark, and encrypt PDFs • Send email responses and text notifications • Fill out online forms Step-by-step instructions walk you through each program, and updated practice projects at the end of each chapter challenge you to improve those programs and use your newfound skills to automate similar tasks. Don't spend your time doing work a well-trained monkey could do. Even if you've never written a line of code, you can make your computer do the grunt work. Learn how in Automate the Boring Stuff with Python, 2nd Edition.

The development of technologies and management of operations is key to sustaining the success of manufacturing businesses, and since the late 1970s, the International Conference on Manufacturing Research (ICMR) has been a major annual event for academics and industrialists engaged in manufacturing research. The conference is renowned as a friendly and inclusive platform that brings together a broad community of researchers who share a common goal. This book presents the proceedings of ICMR2021, the 18th International Conference on Manufacturing Research, incorporating the 35th National Conference on Manufacturing Research, and held in Derby, UK, from 7 to 10 September 2021. The theme of the ICMR2021 conference is digital manufacturing. Within the context of Industrial 4.0, ICMR2021 provided a platform for researchers, academics and industrialists to share their vision, knowledge and experience, and to discuss emerging trends and new challenges in the field. The 60 papers included in the book are divided into 10 parts, each covering a different area of manufacturing research. These are: digital manufacturing, smart manufacturing; additive manufacturing; robotics and industrial automation; composite manufacturing; machining processes; product design and development; information and knowledge management; lean and quality management; and decision support and production optimization. The book will be of interest to all those involved in developing and managing new techniques in manufacturing industry.

Successful Positioning of Network Operators in the Digital Age
Digital Services and Platforms. Considerations for Sourcing

Blockchain and Robotic Process Automation
Handbook of Artificial Intelligence and Robotic Process Automation
How AI and Automation Will Restructure the Workforce
ECIAIR 2019 European Conference on the Impact of Artificial Intelligence and Robotics
Welcome to the World of Hyperautomation

This book constitutes the proceedings of the Blockchain and RPA Forum, of the 19th International Conference on Business Process Management, which took place during September 6-10, 2021, in Rome, Italy. The Blockchain and the RPA Forum have in common that they are centered around an em exciting technology. The blockchain is a sophisticated distributed ledger to while RPA software allows for mimicking human, repetitive actions. Each the potential to fundamentally change how business processes are being and executed in practice. The 8 papers presented in this volume were car reviewed and selected from a total of 14 submissions.

This book presents best selected papers presented at the First Global Co Artificial Intelligence and Applications (GCAIA 2020), organized by the Univ Engineering & Management, Jaipur, India, during 8–10 September 2020. Th proceeding will be targeting the current research works in the domain of systems and artificial intelligence.

This proceedings book presents a multidisciplinary perspective on risk and management. Featuring selected papers presented at the European Risk R Network (ERRN) 8th European Risk Conference "Multiple Perspectives in I Risk Management" held in Katowice, Poland, it explores topics such as ris management systems, risk behaviors, risk culture, big data and risk report regulation. The contributors adopt a wide variety of theoretical approache qualitative or quantitative methodologies. Contemporary companies opera dynamic environment, accompanied by the constant development of the i technology, making decision-making processes highly complex and increasi related to company performance. The European Risk Research Network (E established in 2006 with the aim of stimulating cross-disciplinary researc risk management. The network includes academics and industry experts fi of accounting, auditing, financial economics and mathematical finance. To network lively and fruitful, regular "European Risk Conferences" are organ present papers from a broad spectrum of risk and risk management areas contributions for Italy, South Africa, Germany and Poland, this proceedings valuable reference resource for students, academics, and practitioners in management

This book brings together experts from research and practice. It includes innovative Robot Process Automation (RPA) concepts, the discussion of r research fields (e.g., Artificial Intelligence, AI), the evaluation of existing so products, and findings from real-life implementation projects. Similar to th of physical work in manufacturing (blue collar automation), Robotic Proce tries to substitute intellectual work in office and administration processe robots (white-collar automation). The starting point for the development observation that – despite the use of process-oriented enterprise system

ERP, CRM and BPM systems) – additional manual activities are still indispe
today. In the RPA approach, these manual activities are learned and autom
software robots, either by defining rules or by observing manual activities
related to business process management, machine learning, and artificial i
Tools for RPA originated from dedicated stand-alone software. Today, RPA
functionalities are also integrated into elaborated process management su
conceptual perspective, RPA can be structured into input components (se
wide sense), an intelligence center, and output components (actuators in
sense). From a strategic perspective, the impact of RPA can be related to
of existing tasks, the complete substitution of human activities, and the i
processes as well as business models. At present, high expectations are r
use of RPA in the improvement of software-supported business processes
activities are learned and automated by software robots that interact wi
applications via the presentation layer. In combination with artificial intelli
well as innovative interfaces (e. g., voice recognition) RPA creates a novel
automation for office and administration processes. Its benefit potential r
return on investment (ROI) up-to 800% that is documented in various cas
post-COVID-19

Insightful Decision-Making

Applications of Artificial Intelligence in Engineering

The Automation Advantage: Embrace the Future of Productivity and Impro
Quality, and Customer Experience Through AI

Robotic Process Automation

Enterprise Artificial Intelligence Transformation

Business Revolution in a Digital Era

*HYPERAUTOMATION is a collection of expert essays on low-code development and the future
of business process automation. In each chapter, an academic, analyst, implementer, or end-
user examines different aspects of low-code and automation in the enterprise, clarifying
both value and barriers through personal experiences and insights. With contributions from:
Dr. George Westerman, MIT - Neil Ward-Dutton, IDC - Lakshmi N, Tata Consultancy Services
- Sidney Fernandes & Alice Wei, University of South Florida - Lisa Heneghan, KPMG - Chris
Skinner, FinTech expert - John R. Rymer, Forrester (Emeritus) - Isaac Sacolick, StarCIO -
Darren Blake, Bexley Neighbourhood Care - Rob Galbraith, InsureTech expert - Ron Tolido,
Capgemini - Michael Beckley, Appian All proceeds from the sale of this book will be donated
to Black Girls Code, an organization providing young girls of color opportunities to learn in-
demand skills in technology and computer programming.*

*This book integrates the material of the lecture series "Blockchain and Robotic Process
Automation", offered at Kiel University. The lecture series sheds light on current research
topics on blockchain and robotic process automation (RPA) also in combination with
business process management (BPM) or process mining. In this series, leading scientists and
business experts give insights into the use of the blockchain technology and RPA. The seven
contributions included offer a general introduction into blockchain and smart contracts, and
detail the extraction of meaningful events for process mining from blockchain, challenges of
blockchain-based collaborative business processes, executing Decision Model and Notation
decisions on the blockchain, a blockchain-based solution for digital payment, blockchain use
cases in transportation and logistics, and automatically identifying process automation
candidates using natural language processing. Overall, the book provides researchers and
graduate students with a basic introduction into blockchain, its applications, useful*

combinations of BPM and blockchain, and use cases for RPA.
Intelligent Systems Design and Applications
Today and Tomorrow
Artificial Intelligence for Future Generation Robotics
Select Proceedings of AISE 2020, Volume 2
Information Systems Architecture and Technology: Proceedings of 39th International Conference on Information Systems Architecture and Technology – ISAT 2018
Getting Started with Business Analytics
12th Global Sourcing Workshop 2018, La Thuile, Italy, February 21–24, 2018, Revised Selected Papers