

Sap Leonardo Machine Learning Foundation

The book provides foundations of machine learning and algorithms with a road map to deep learning, genesis of machine learning, installation of Python, supervised machine learning algorithms and implementations in Python or R, unsupervised machine learning algorithms in Python or R including natural language processing techniques and algorithms, Bayesian statistics, origins of deep learning, neural networks, and all the deep learning algorithms with some implementations in TensorFlow and architectures, installation of TensorFlow, neural net implementations in TensorFlow, Amazon ecosystem for machine learning, swarm intelligence, machine learning algorithms, in-memory computing, genetic algorithms, real-world research projects with supercomputers, deep learning frameworks with Intel deep learning platform, Nvidia deep learning frameworks, IBM PowerAI deep learning frameworks, H2O AI deep learning framework, HPC with deep learning frameworks, GPUs and CPUs, memory architectures, history of supercomputing, infrastructure for supercomputing, installation of Hadoop on Linux operating system, design considerations, e-Therapeutics's big data project, infrastructure for in-memory data fabric Hadoop, healthcare and best practices for data strategies, R, architectures, NoSQL databases, HPC with parallel computing, MPI for data science and HPC, and JupyterLab for HPC.

Put machine learning to work in SAP S/4HANA! Get started by reviewing your available tools and implementation options. Then, learn how to set up services, train models, and manage applications. Discover how machine learning is implemented in key lines of business, from finance to sales. With details on extensibility and related SAP Cloud Platform services, you'll find everything you need to make the most of machine learning! In this book, you'll learn about: a. Tools and Technologies Get to know the machine learning toolkit you can use to consume models: SAP HANA, SAP Cloud Platform, SAP Analytics Cloud, SAP Intelligent Robotic Process Automation, and more. b. Technical Implementation Perform the technical setup in SAP S/4HANA. Learn how to implement key services, train machine learning models, and manage applications, from data integration

to user interface design. c. Business Implementation See how machine learning improves your lines of business. Explore machine learning in SAP S/4HANA business processes for finance, procurement, sales, inventory, and more. Highlights Include: 1) Predictive analytics 2) Predictive intelligence 3) Tools and technologies 4) Architecture 5) Embedded services 6) Technical implementation 7) Business implementation 8) Extensibility 9) SAP HANA 10) SAP Cloud Platform 11) SAP Analytics Cloud

"Start your CFin project! Learn how Central Finance fits in to your IT landscape, and how it will impact your finance processes, reporting, and master data. Get step-by-step instructions for implementation and tips for project management from this one-stop shop for everything Central Finance!"--

This book constitutes the refereed proceedings of the 15th IFIP WG 12.5 International Conference on Artificial Intelligence Applications and Innovations, AIAI 2019, held in Hersonissos, Crete, Greece, in May 2019. The 49 full papers and 6 short papers presented were carefully reviewed and selected from 101 submissions. They cover a broad range of topics such as deep learning ANN; genetic algorithms - optimization; constraints modeling; ANN training algorithms; social media intelligent modeling; text mining/machine translation; fuzzy modeling; biomedical and bioinformatics algorithms and systems; feature selection; emotion recognition; hybrid Intelligent models; classification - pattern recognition; intelligent security modeling; complex stochastic games; unsupervised machine learning; ANN in industry; intelligent clustering; convolutional and recurrent ANN; recommender systems; intelligent telecommunications modeling; and intelligent hybrid systems using Internet of Things. The papers are organized in the following topical sections: AI anomaly detection - active learning; autonomous vehicles - aerial vehicles; biomedical AI; classification - clustering; constraint programming - brain inspired modeling; deep learning - convolutional ANN; fuzzy modeling; learning automata - logic based reasoning; machine learning - natural language; multi agent - IoT; nature inspired flight and robot; control - machine vision; and recommendation systems.

Künstliche Intelligenz

The Hallmarks of the Great Beyond in Pytorch, R, Tensorflow, and Python

SAP Data Intelligence

15th IFIP WG 12.5 International Conference, AIAI 2019, Hersonissos, Crete, Greece, May 24–26, 2019, Proceedings

The Digital Journey of Banking and Insurance, Volume III

European Conference, ECML PKDD 2021, Bilbao, Spain, September 13–17, 2021, Proceedings, Part III

Data Storage, Data Processing and Data Analysis

This research scholarly illustrated book has more than 250 illustrations. The simple models of supervised machine learning with Gaussian Naïve Bayes, Naïve Bayes, decision trees, classification rule learners, linear regression, logistic regression, local polynomial regression, regression trees, model trees, K-nearest neighbors, and support vector machines lay a more excellent foundation for statistics. The author of the book Dr. Ganapathi Pulipaka, a top influencer of machine learning in the US, has created this as a reference book for universities. This book contains an incredible foundation for machine learning and engineering beyond a compact manual. The author goes to extraordinary lengths to make academic machine learning and deep learning literature comprehensible to create a new body of knowledge. The book aims at readership from university students, enterprises, data science beginners, machine learning and deep learning engineers at scale for high-performance computing environments. A Greater Foundation of Machine Learning Engineering covers a broad range of classical linear algebra and calculus with program implementations in PyTorch, TensorFlow, R, and Python with in-depth coverage. The author does not hesitate to go into math equations for each algorithm at length that usually many foundational machine learning books lack leveraging the JupyterLab environment. Newcomers can leverage the book from University or people from all walks of data science or software lives to the advanced practitioners of machine learning and deep learning. Though the book title suggests machine learning, there are several implementations of deep learning algorithms, including deep reinforcement learning. The book's mission is to help build a strong foundation for machine learning and deep learning engineers with all the algorithms, processors to train and deploy into production for enterprise-wide machine learning implementations. This book also introduces all the concepts of natural language processing required for machine learning algorithms in Python. The book covers Bayesian statistics without assuming high-level mathematics or statistics experience from the readers. It delivers the core concepts and implementations required with R code with open datasets. The book also covers unsupervised machine learning algorithms with association rules and k-means clustering, metal-learning algorithms, bagging, boosting, random forests, and ensemble methods. The book delves into the origins of deep learning in a scholarly way covering neural networks, restricted Boltzmann machines, deep belief networks, autoencoders, deep Boltzmann machines, LSTM, and natural language processing techniques with deep learning algorithms and math equations. It leverages the NLTK library of Python with PyTorch, Python, and TensorFlow's installation steps, then demonstrates how to build neural networks with TensorFlow. Deploying machine learning algorithms require a blend of cloud computing platforms, SQL databases, and NoSQL databases. Any data scientist with a statistics background that looks to transition into a machine learning engineer role requires an in-depth understanding of machine learning project implementations on Amazon, Google, or Microsoft Azure cloud computing platforms. The book provides real-world client projects for understanding the complete implementation of machine learning algorithms. This book is a marvel that does not leave any application of machine learning and deep learning

algorithms. It sets a more excellent foundation for newcomers and expands the horizons for experienced deep learning practitioners. It is almost inevitable that there will be a series of more advanced algorithms follow-up books from the author in some shape or form after setting such a perfect foundation for machine learning engineering.

Learn how to migrate your SAP data to Azure simply and successfully. Key Features Learn why Azure is suitable for business-critical systems Understand how to migrate your SAP infrastructure to Azure Use Lift & shift migration, Lift & migrate, Lift & migrate to HANA, or Lift & transform to S/4HANA Book Description Cloud technologies have now reached a level where even the most critical business systems can run on them. For most organizations SAP is the key business system. If SAP is unavailable for any reason then potentially your business stops. Because of this, it is understandable that you will be concerned whether such a critical system can run in the public cloud. However, the days when you truly ran your IT system on-premises have long since gone. Most organizations have been getting rid of their own data centers and increasingly moving to co-location facilities. In this context the public cloud is nothing more than an additional virtual data center connected to your existing network. There are typically two main reasons why you may consider migrating SAP to Azure: You need to replace the infrastructure that is currently running SAP, or you want to migrate SAP to a new database. Depending on your goal SAP offers different migration paths. You can decide either to migrate the current workload to Azure as-is, or to combine it with changing the database and execute both activities as a single step. SAP on Azure Implementation Guide covers the main migration options to lead you through migrating your SAP data to Azure simply and successfully. What you will learn Successfully migrate your SAP infrastructure to Azure Understand the security benefits of Azure See how Azure can scale to meet the most demanding of business needs Ensure your SAP infrastructure maintains high availability Increase business agility through cloud capabilities Leverage cloud-native capabilities to enhance SAP Who this book is for SAP on Azure Implementation Guide is designed to benefit existing SAP architects looking to migrate their SAP infrastructure to Azure. Whether you are an architect implementing the migration or an IT decision maker evaluating the benefits of migration, this book is for you.

Take a deep dive into the concepts of machine learning as they apply to contemporary business and management. You will learn how machine learning techniques are used to solve fundamental and complex problems in society and industry. Machine Learning for Decision Makers serves as an excellent resource for establishing the relationship of machine learning with IoT, big data, and cognitive and cloud computing to give you an overview of how these modern areas of computing relate to each other. This book introduces a collection of the most important concepts of machine learning and sets them in context with other vital technologies that decision makers need to know about. These concepts span the process from envisioning the problem to applying machine-learning techniques to your particular situation. This discussion also provides an insight to help deploy the results to improve decision-making. The book uses case studies and jargon busting to help you grasp the theory of machine learning quickly. You'll soon gain the big picture of machine learning and how it fits with other cutting-edge IT services. This knowledge will give you confidence in your decisions for the future of your business. What You Will Learn Discover the machine learning, big data, and cloud and cognitive computing technology stack Gain insights into machine learning concepts and practices Understand business and enterprise decision-making using machine learning Absorb machine-learning best practices Who This Book Is For Managers tasked with making key decisions who want to learn how and when machine learning and related technologies can help them.

Digitalization is changing nearly everything. This compendium highlights a comprehensive understanding of the concepts and technologies about digitalization in industrial environments, using the Industrial Internet of Things, Digital Twins and data-driven decision-making approaches including Artificial Intelligence. The overview of industrial enterprise platforms and the consideration of future trends gives a fundamental idea

of concepts and strategies, how to get started and about the required changes of business models.

The Comprehensive Guide

Development Associate Exam

Practical Guide to SAP HANA and Big Data Analytics

Machine Learning for Decision Makers

Feature Engineering for Machine Learning

Move your business data to the cloud

Machine Learning and Knowledge Discovery in Databases. Research Track

As technology grows more effective and refined, businesses and organizations are increasingly taking advantage by automating processes that were once presided over by human workers. As businesses explore the benefits of machine learning, research is necessary to examine the effects of the integration of technology to human workplaces. Advancing Skill Development for Business Managers in Industry 4.0: Emerging Research and Opportunities is an essential publication that examines Industry 4.0 and the important technological applications that revolutionize and disrupt modern organizations, such as artificial intelligence, machine learning, and programming languages, such as Python, to contextualize big data in business and frame the skills necessary for a high-performing modern workforce. The book provides a conceptual framework, analysis, and discussion of the issues concerning organizational behavior through the lens of organizational culture and emotions. Covering topics that include data-driven organizations, the digital business models, and leadership techniques, this book is ideally designed for managers, executives, IT specialists, computer engineers, data scientists, researchers, academicians, and students.

The multi-volume set LNAI 12975 until 12979 constitutes the refereed proceedings of the European Conference on Machine Learning and Knowledge Discovery in Databases, ECML PKDD 2021, which was held during September 13-17, 2021. The conference was originally planned to take place in Bilbao, Spain, but changed to an online event due to the COVID-19 pandemic. The 210 full papers presented in these proceedings were carefully reviewed and selected from a total of 869 submissions. The volumes are organized in topical sections as follows: Research Track: Part I: Online learning; reinforcement learning; time series, streams, and sequence models; transfer and multi-task learning; semi-supervised and few-shot learning; learning algorithms and applications. Part II: Generative models; algorithms and learning theory; graphs and networks; interpretation, explainability, transparency, safety. Part III: Generative models; search and optimization; supervised learning; text mining and natural language processing; image processing, computer vision and visual analytics. Applied Data Science Track: Part IV: Anomaly detection and malware; spatio-temporal data; e-commerce and finance; healthcare and medical applications (including Covid); mobility and transportation. Part V: Automating machine learning, optimization, and feature engineering; machine learning based simulations and knowledge discovery; recommender systems and behavior modeling; natural language processing; remote sensing, image and video processing; social media.

This book is composed of a selection of articles from The 2021 World Conference on Information Systems and Technologies (WorldCIST'21), held online between 30 and 31 of March and 1 and 2 of April 2021 at Hangra de Heroismo, Terceira Island, Azores, Portugal. WorldCIST is a global forum for researchers and practitioners to present and discuss recent results and innovations, current trends, professional experiences and challenges of modern information systems and technologies research, together with their technological development and applications. The main topics covered are: A) Information and Knowledge Management; B) Organizational Models and Information Systems; C) Software and Systems Modeling; D) Software Systems, Architectures, Applications and Tools; E) Multimedia Systems and Applications; F) Computer Networks, Mobility and Pervasive Systems; G) Intelligent and Decision Support Systems; H) Big Data Analytics and Applications; I) Human-Computer Interaction; J) Ethics, Computers & Security; K) Health Informatics; L)

Information Technologies in Education; M) Information Technologies in Radiocommunications; N) Technologies for Biomedical Applications.

Meet your BI needs with SAP S/4HANA embedded analytics! Explore the system architecture and data model and learn how to perform analytics on live transactional data. Business user? Walk step-by-step through SAP Smart Business KPIs, dashboards, and multidimensional reporting. Analytics specialist? Master the virtual data model and report creation. Jack of all trades? Create CDS views, apply custom fields and logic, and learn to integrate SAP S/4HANA with SAP Analytics Cloud. This is your complete guide to SAP S/4HANA embedded analytics! Highlights include: 1) Architecture 2) Virtual data model (VDM) 3) CDS views 4) SAP Fiori apps 5) SAP Smart Business 6) Key performance indicators (KPIs) 7) Dashboards 8) Reporting 9) Data warehousing 10) SAP Analytics Cloud 11) Machine learning

A Greater Foundation for Machine Learning Engineering

Business Information Systems Workshops

Decision-Maker's Guide to SAP S/4HANA Cloud, essentials edition

Principles and Techniques for Data Scientists

Proceedings of International Conference on Intelligent Computing, Information and Control Systems

Internet of Things with SAP

Artificial Intelligence Applications and Innovations

Work smarter with machine learning! Begin with core machine learning concepts--types of learning, algorithms, data preparation, and more. Then use SAP Data Intelligence, SAP HANA, and other technologies to create your own machine learning applications. Master the SAP HANA Predictive Analysis Library (PAL) and machine learning functional and business services to train and deploy models. Finally, see machine learning in action in industries from manufacturing to banking. a. Foundation Build your understanding of probability concepts and algorithms that drive machine learning. See how linear regression, classification, and cluster analysis algorithms work, before plugging them into your very own machine learning app! b. Development Follow step-by-step instructions to gather and prepare data, create machine learning models, train and fine-tune models, and deploy your final app, all using SAP HANA and SAP Data Intelligence. c. Platforms Use built-in SAP HANA libraries to create applications that consume machine learning algorithms or integrate with the R language for additional statistical capabilities. Work with the SAP Leonardo functional services to customize and embed pre-trained models into applications or bring your own model with the help of Google TensorFlow. 1) Development 2) Retraining 3) Implementation 4) SAP Data Intelligence 5) SAP HANA predictive analysis library 6) SAP HANA extended machine learning library 7) SAP HANA automated predictive library 8) Google TensorFlow 9) Embedded machine learning 10) SAP Conversational AI 11) SAP Analytics Cloud Smart Predict

Unpack your API toolkit with this guide to SAP API Management. Learn how to use the API Designer to create enterprise APIs and discover how to manage their lifecycle. Walk through key processes that optimize your APIs and keep them running smoothly: traffic management, mediation, security, and monetization. Get expert guidance on building applications, generating integration flows, and running analytics. Master API management from end to end In this book, you'll learn about: a. API Lifecycle Walk through API management from end to end: design, management, consumption, and more. Understand how components such as the Developer Portal and API Gateway support the API lifecycle. b. Key Processes Make the most of your APIs. See how to monitor traffic; perform message transformation, parsing, and validation; handle API security threats; and monetize API products. c. Consumption and Analytics Get your APIs working for you. Learn how to consume APIs in SAP Fiori apps, mobile apps built with SAP Mobile Services, and more. Then, analyze API consumption to gain insight into usage

trends and performance. Highlights Include: 1) Architecture 2) End-to-end lifecycle 3) Design and development 4) Traffic management 5) Mediation 6) Security 7) Monetization 8) Consumption 9) Enterprise integration 10) Analytics 11) SAP API Business Hub

This book is a collection of papers presented at the International Conference on Intelligent Computing, Information and Control Systems (ICICCS 2020). It encompasses various research works that help to develop and advance the next-generation intelligent computing and control systems. The book integrates the computational intelligence and intelligent control systems to provide a powerful methodology for a wide range of data analytics issues in industries and societal applications. The book also presents the new algorithms and methodologies for promoting advances in common intelligent computing and control methodologies including evolutionary computation, artificial life, virtual infrastructures, fuzzy logic, artificial immune systems, neural networks and various neuro-hybrid methodologies. This book is pragmatic for researchers, academicians and students dealing with mathematically intransigent problems.

Developers! Make the grade with this SAP Cloud Platform certification study guide. From application development and integration to mobile services and the Internet of Things, this guide will review the key technical and functional knowledge you need to pass with flying colors. Explore test methodology, key concepts for each topic area, and practice questions and answers to solidify your knowledge. Your path to SAP Cloud Platform certification begins here! a. Test Structure Prepare with up-to-date information on each topic covered in the C_CP_13 exam, including application development, extension, and integration. b. Core Content Review major subject areas like architecture, the Cloud Foundry and Neo development environments, SAP Cloud Platform Internet of Things, and SAP Cloud Platform Mobile Services. Then dial in with important terminology, and key takeaways for each subject. c. Q&A After reviewing chapters, test your skills with in-depth questions and answers for each section and improve your test-taking skills. 1) C_CP_13 2) Architecture 3) Development, extension, and integration 4) SAP Cloud Platform Mobile Services 5) SAP Cloud Platform Internet of Things 6) SAP Cloud Platform SDK 7) SAP Cloud Platform SDK for the Neo environment 8) Cloud Foundry 9) Java 10) SAP HANA XS 11) SAPUI5

SAP API Management

Emerging Research and Opportunities

Building Intelligent Enterprises

SAP Leonardo

Volume 2

Big Data, IoT, and Machine Learning

Looking to innovate, transform processes, or just get more from your data? This guide to SAP Leonardo shows you how new technologies--from machine learning to blockchain--intersect with existing processes to transform your business. You'll walk through practical examples of SAP Leonardo tools at work in manufacturing, product management, logistics, finance, and more. From using machine learning for smart manufacturing to leveraging IoT and big data for a connected fleet, you'll get the hands-on introduction to SAP Leonardo you've been looking for. Highlights include: -SAP Leonardo Analytics -SAP Leonardo Big Data -SAP Leonardo Blockchain -SAP Leonardo Internet of Things -SAP Leonardo Machine Learning -Data intelligence -Manufacturing and assets -Products and inventory -Logistics -Finance

In this book written for SAP BI, big data, and IT architects, the authors expertly provide clear recommendations for building modern analytics architectures running on SAP HANA technologies. Explore integration with big data frameworks and predictive analytics components. Obtain the

tools you need to assess possible architecture scenarios and get guidelines for choosing the best option for your organization. Know your options for on-premise, in the cloud, and hybrid solutions. Readers will be guided through SAP BW/4HANA and SAP HANA native data warehouse scenarios, as well as field-tested integration options with big data platforms. Explore migration options and architecture best practices. Consider organizational and procedural changes resulting from the move to a new, up-to-date analytics architecture that supports your data-driven or data-informed organization. By using practical examples, tips, and screenshots, this book explores: - SAP HANA and SAP BW/4HANA architecture concepts - Predictive Analytics and Big Data component integration - Recommendations for a sustainable, future-proof analytics solutions - Organizational impact and change management

Building Intelligent Enterprises by leveraging the emerging and next-generation technologies to accelerate the adoption of digital transformation The speed of innovation and emerging IT technologies are changing at a very fast pace and enterprises are eager to join the digital revolution so they can stand above the competition and succeed as the enterprise of tomorrow. This book is an attempt to make the enterprise intelligent by providing the path to digital transformation and the adoption of new IT methods, tools and technologies. This book has been organized to cover the following topics: Digital Transformation, Design Thinking, Agile, DevOps, Robotic Process Automation, Internet of Things, Artificial Intelligence, Machine Learning, Blockchain, Drones, Augmented and Virtual Reality, 3D Printing, Big Data, Analytics, Cloud Computing, APIs, and SAP Leonardo. No prior knowledge of any technical coding or language is necessary to understand the content of this book. End-to-end storyline to accelerate the enterprise's digital transformation journey How an enterprise can stay relevant, compete, and perform in the digital economy How to leverage these technologies to build intelligent enterprises Understand and apply the emerging technologies across key business processes Industry-specific Use Cases for all technologies as a reference point to build the business case for implementation The book is very well suited towards the C-Suite executives, both IT and business leaders, directors and managers, project managers, solution architects, and all professionals who have an interest and desire to keep up-to-date with the latest technological trends, looking for a career change, want to help enterprise adapt and onboard the digital roadmap, or have an agenda to digitize key processes within the enterprise to make it intelligent. Dieses Buch soll dabei helfen, die neuen Technologien und Anwendungspotenziale der künstlichen Intelligenz besser zu verstehen und einzuordnen. Neben einer ausführlichen und verständlichen Vermittlung grundlegender Kenntnisse und ökonomischer Effekte der künstlichen Intelligenz enthält es viele Anwendungsbeispiele bekannter Unternehmen. Konzerne wie Amazon, IBM, Microsoft, SAP oder VW lassen die Leser in ihre KI-Labors schauen und erklären konkrete Projekte zu Themen, wie z. B. Chatbots, Quantencomputing, Gesichtserkennung, sprachbasierte Systeme oder den Einsatz von KI-Anwendungen in den Bereichen Marketing, Vertrieb, Finanzen, Personalwesen, Produktion, Gesundheit sowie Logistik. Das Buch richtet sich an Entscheider in Unternehmen, Studierende, Dozenten und alle, die sich ein Bild über die vielleicht wichtigste technologische Entwicklung in diesem Jahrhundert machen möchten.

Guia para iniciantes do SAP

Trends and Applications in Information Systems and Technologies

SAP on Azure Implementation Guide

SAP Predictive Analytics

BIS 2019 International Workshops, Seville, Spain, June 26–28, 2019, Revised Papers

Cómo cambiará nuestro trabajo tras el COVID-19

An Introduction

Feature engineering is a crucial step in the machine-learning pipeline, yet this topic is rarely examined on its own. With this practical book, you'll learn techniques for extracting and transforming features—the numeric representations of raw data—into formats for machine-learning models. Each chapter guides you through a single data problem, such as how to represent text or image data. Together, these examples illustrate the main principles of feature engineering. Rather than simply teach these principles, authors Alice Zheng and Amanda Casari focus on practical application with exercises throughout the book. The closing chapter brings everything together by tackling a real-world, structured dataset with several feature-engineering techniques. Python packages including numpy, Pandas, Scikit-learn, and Matplotlib are used in code examples. You'll examine:

- Feature engineering for numeric data: filtering, binning, scaling, log transforms, and power transforms*
- Natural text techniques: bag-of-words, n-grams, and phrase detection*
- Frequency-based filtering and feature scaling for eliminating uninformative features*
- Encoding techniques of categorical variables, including feature hashing and bin-counting*
- Model-based feature engineering with principal component analysis*
- The concept of model stacking, using k-means as a featurization technique*
- Image feature extraction with manual and deep-learning techniques*

You've worked with ABAP, SAP Fiori, and OData--now see how these technologies and more come together in the ABAP RESTful programming model! Build on your expertise to create cloud-ready applications for SAP S/4HANA and deploy applications to the SAP Fiori launchpad. Manage applications with Git version control, automated testing, and continuous integration. Make the new model work for you!

- 1) ABAP RESTful programming model*
- 2) End-to-end development*
- 3) SAP S/4HANA*
- 4) SAP Fiori Elements*
- 5) Business objects*
- 6) Deployment*
- 7) Core data services (CDS)*
- 8) OData services*
- 9) Automated testing*
- 10) Continuous integration*
- 11) SAP Cloud Platform*

a. ABAP RESTful Programming Model Develop web-based SAP HANA-optimized ABAP applications for SAP S/4HANA. Master the new ABAP RESTful programming model, from queries, business objects, and business services, to its relationship to SAP Fiori and SAP Gateway.

b. SAP Fiori Elements and Freestyle Applications Get the step-by-step instructions you need to create list reports, overview pages, analytical list pages, and freestyle applications. See how the ABAP RESTful programming model incorporates core data services, business object behaviors, OData, and more.

c. Deployment and Operations Once your applications are developed, deploy them to the SAP Fiori launchpad. Implement Git version control, automated backend and frontend testing, and continuous

integration.

This book constitutes revised papers from the nine workshops and one accompanying event which took place at the 22nd International Conference on Business Information Systems, BIS 2019, held in Seville, Spain, in June 2019. There was a total of 139 submissions to all workshops of which 57 papers were accepted for publication. The workshops included in this volume are: AKTB 2019: 11th Workshop on Applications of Knowledge-Based Technologies in Business BITA 2019: 10th Workshop on Business and IT Alignment BSCT 2019: Second Workshop on Blockchain and Smart Contract Technologies DigEX 2019: First International Workshop on transforming the Digital Customer Experience iCRM 2019: 4th International Workshop on Intelligent Data Analysis in Integrated Social CRM iDEATE 2019: 4th Workshop on Big Data and Business Analytics Ecosystems ISMAD 2019: Workshop on Information Systems and Applications in Maritime Domain QOD 2019: Second Workshop on Quality of Open Data SciBOWater 2019: Second Workshop on Scientific Challenges and Business Opportunities in Water Management

Waren Methoden der Künstlichen Intelligenz (KI) bis vor wenigen Jahren noch ausschließlich ein Thema von wissenschaftlichen Diskussionen, so finden sie heute zunehmend Eingang in Produkte des täglichen Lebens. Gleichzeitig wächst die Menge der produzierten und verfügbaren Daten aufgrund der zunehmenden Digitalisierung, der Integration digitaler Mess- und Regelsysteme und des automatischen Austausches zwischen Geräten (Internet of Things). Dabei wird zukünftig der Einsatz von Business Intelligence (BI) und ein Blick in die Vergangenheit für die meisten Unternehmen nicht mehr ausreichen. Um in Zukunft im Wettbewerb bestehen zu können, wird vielmehr Business Analytics benötigt, also vorausschauende und prädiktive Analysen und automatisierte Entscheidungen. Die Nutzung der wachsenden Datenmengen ist dabei eine bedeutende Herausforderung und einen der wichtigsten Bereiche der Datenanalyse stellen Methoden der Künstliche Intelligenz dar. Das Buch führt in komprimierter Form in die essenziellen Aspekte des Einsatzes von Methoden der Künstlichen Intelligenz für Business Analytics ein, stellt das Maschinelle Lernen und die wichtigsten Algorithmen in verständlicher Form anhand des Business Analytics Technologieframeworks vor und zeigt Anwendungsszenarien aus verschiedenen Branchen. Dazu liefert es mit dem Business Analytics Model for Artificial Intelligence ein Referenzvorgehensmodell zur Strukturierung von BA- und KI-Projekten im Unternehmen.

*Welcome to the World of Hyperautomation
Machine Learning with SAP*

SAP C/4HANA

Advancing Skill Development for Business Managers in Industry 4.0: Emerging Research and Opportunities

SAP S/4HANA

INTELLIGENT AUTOMATION

Digital Transformation

"Work smarter with machine learning! Begin with core machine learning concepts-types of learning, algorithms, data preparation, and more. Then use SAP Leonardo, SAP HANA, and other technologies to create your own machine learning applications. Master the SAP HANA Predictive Analysis Library (PAL) and SAP Leonardo Machine Learning Foundation's functional and business services to train and deploy models. Finally, see machine learning in action in industries from manufacturing to banking"--

Enter the fast-paced world of SAP HANA 2.0 with this introductory guide. Begin with an exploration of the technological backbone of SAP HANA as a database and platform. Then, step into key SAP HANA user roles and discover core capabilities for administration, application development, advanced analytics, security, data integration, and more. No matter how SAP HANA 2.0 fits into your business, this book is your starting point. In this book, you'll learn about: a. Technology Discover what makes an in-memory database platform. Learn about SAP HANA's journey from version 1.0 to 2.0, take a tour of your technology options, and walk through deployment scenarios and implementation requirements. b. Tools Unpack your SAP HANA toolkit. See essential tools in action, from SAP HANA cockpit and SAP HANA studio, to the SAP HANA Predictive Analytics Library and SAP HANA smart data integration. c. Key Roles Understand how to use SAP HANA as a developer, administrator, data scientist, data center architect, and more. Explore key tasks like backend programming with SQLScript, security setup with roles and authorizations, data integration with the SAP HANA Data Management Suite, and more. Highlights include: 1) Architecture 2) Administration 3) Application development 4) Analytics 5) Security 6) Data integration 7) Data architecture 8) Data center

This book, the third one of three volumes, focuses on data and the actions around data, like storage and processing. The angle shifts over the volumes from a business-driven approach in "Disruption and DNA" to a strong technical focus in "Data Storage, Processing and Analysis", leaving "Digitalization and Machine Learning Applications" with the business and technical aspects in-between. In the last volume of the series, "Data Storage, Processing and Analysis", the shifts in the way we deal with data are addressed.

¿En qué piensan los políticos cuando hablan de crecimiento y creación de trabajo? ¿Cómo pasar de una economía de especulación, deslocalización productiva y guerra a una economía basada en el conocimiento, para procurar un desarrollo global sostenible y humano? A estos interrogantes da respuesta el presente texto en el que un grupo de expertos procedentes de distintas disciplinas, y reunidos bajo el paraguas del colectivo Cibercotizante, nos describe el modo en que la economía digital abre un nuevo modelo que afecta a la casi totalidad de las actividades y conlleva, de modo urgente,

importantes reformas en las relaciones laborales y cambios en el mercado de trabajo. La robotización y el empleo son protagonistas destacados en la economía digital. Diversos trabajos publicados por entidades de prestigio, contienen datos y predicciones que nos sitúan en un escenario más que preocupante en cuanto a la evolución del mercado laboral. Estas páginas repasan los problemas que preocupan a la sociedad. El talento senior, la formación como motor de la recapacitación profesional de los trabajadores, la inteligencia artificial y el machine learning, las amenazas de los ciberdelincuentes, los comportamientos éticos en el mundo digital, las situaciones colaterales de la implantación de una renta básica o los nuevos retos digitales como el teletrabajo y la desconexión digital son analizados con el fin de ofrecer unos conocimientos sólidos para iniciar ese gran debate imprescindible para entender cómo será la década que hemos empezado con tan graves amenazas como la crisis derivada del COVID-19. «Nos hallamos frente a un nuevo concepto de trabajo, a una mecanización y robotización imparable, que requiere que sea la máquina la que esté al servicio de la humanidad y no la humanidad sometida a la máquina. Este nuevo concepto de trabajo requiere una educación que, desde las primeras etapas, forme plena conciencia de la igual dignidad de todos los seres humanos, sea cual sea el género, el color de la piel, la edad, la ideología, la creencia...» (Federico Mayor Zaragoza)

Mit Algorithmen zum wirtschaftlichen Erfolg

Implementation and Development

ABAP RESTful Programming Model

Tools and Applications

The Essentials of Machine Learning in Finance and Accounting

El empleo en la era digital

Central Finance and SAP S/4HANA

The idea behind this book is to simplify the journey of aspiring readers and researchers to understand Big Data, IoT and Machine Learning. It also includes various real-time/offline applications and case studies in the fields of engineering, computer science, information security and cloud computing using modern tools. This book consists of two sections: Section I contains the topics related to Applications of Machine Learning, and Section II addresses issues about Big Data, the Cloud and the Internet of Things. This brings all the related technologies into a single source so that undergraduate and postgraduate students, researchers, academicians and people in industry can easily understand them. Features Addresses the complete data science technologies workflow Explores basic and high-level concepts and services as a manual for those in the industry and at the same time can help beginners to understand both basic and advanced aspects of machine learning Covers data processing and security solutions in IoT and Big Data applications Offers adaptive, robust, scalable and reliable applications to develop solutions for day-to-day problems Presents security issues and data migration techniques of NoSQL databases

Manage your data landscape with SAP Data Intelligence! Begin by understanding its architecture and capabilities and then see how to set up and install SAP Data Intelligence with step-by-step instructions. Walk through SAP Data Intelligence applications

and learn how to use them for data governance, orchestration, and machine learning. Integrate with ABAP-based systems, SAP Vora, SAP Analytics Cloud, and more. Manage, secure, and operate SAP Data Intelligence with this all-in-one guide! In this book, you'll learn about:

- Configuration** Build your SAP Data Intelligence landscape! Use SAP Cloud Appliance Library for cloud deployment, including provisioning, sizing, and accessing the launchpad. Perform on-premise installations using tools like the maintenance planner.
- Capabilities** Put the core capabilities of SAP Data Intelligence to work! Manage and govern your data with the metadata explorer, use the modeler application to create data processing pipelines, create apps with the Jupyter Notebook, and more.
- Integration and Administration** Integrate, manage, and operate SAP Data Intelligence! Get step-by-step instructions for integration with SAP and non-SAP systems. Learn about key administration tasks and make sure your landscape is secure and running smoothly.

Highlights include:

- 1) Configuration and installation
- 2) Data governance
- 3) Data processing pipelines
- 4) Docker images
- 5) ML Scenario Manager
- 6) Jupyter Notebook
- 7) Python SDK
- 8) Integration
- 9) Administration
- 10) Security
- 11) Application lifecycle management
- 12) Use cases

This book presents SAP Next-Gen, an innovation community for SAP Leonardo. It is intended for next generation business leaders, Chief Digital Officers, Chief Innovation Officers, Chief Information Officers and IT professionals who are defining the vision, strategy, technologies and organizational changes needed to drive their exponential enterprise and to innovate with purpose. The book opens with an introduction to turning bold ideas into reality with a purpose-driven mindset supporting the 17 United Nations Global Goals. Part 1 focuses on what's at stake including Digital - The New Normal, Exponential Growth, and Innovation in the 21st century. Part 2 introduces readers to the SAP Next-Gen matchmaking model, and readers are invited to join SAP Next-Gen clubs for industries, technologies, and methodologies. Readers also learn about the Silicon Valleys of the world, make vs. buy vs. join, and where to learn more and get engaged with SAP Next-Gen. SAP Next-Gen is an innovation community for SAP Leonardo supporting SAP's 355,000+ customers across 25 industries in 180+ countries. SAP Next-Gen enables customers and partners to connect with academic thought leaders, researchers, and students in the SAP Next-Gen network of 3,200+ educational institutions across 111 countries worldwide, as well as with startups, tech community partners, venture firms, purpose driven partners, and SAP experts.

Machine Learning with SAP

SAP S/4HANA Embedded Analytics

SAP HANA 2.0

ABAP Development for SAP S/4HANA

Geometric Perturbation Theory in Physics

Handbook Of Digital Enterprise Systems: Digital Twins, Simulation And Ai

SAP Next-Gen

SAP Cloud Platform Certification Guide

This book introduces machine learning in finance and illustrates how we can use computational tools in numerical finance in real-world context. These computational techniques are particularly useful in financial risk management, corporate bankruptcy prediction, stock price prediction, and portfolio management. The book also offers practical and managerial implications of financial and managerial decision support systems and how these systems capture vast amount of financial data. Business risk and uncertainty are two of the toughest challenges in the financial industry. This book will be a useful guide to the use of machine learning in forecasting, modeling, trading, risk management, economics, credit risk, and portfolio management.

Are you ready to build smart applications? See how to develop IoT apps and manage devices with SAP Leonardo and SAP Cloud Platform. Then, perform real-time data processing and analysis with SAP Edge Services. Walk through the configuration steps for edge scenarios, and learn how SAP partner solutions can be used in conjunction with SAP Leonardo. Explore relevant use cases, and envision what IoT can bring to your business! In this book, you'll learn about: a. Internet of Things

Technologies Discover the solutions SAP provides for IoT. See how SAP Leonardo Internet of Things, SAP Edge Services, and SAP Cloud Platform Internet of Things support IoT applications during development, implementation, and analysis. b.

Application Development Develop IoT applications, step by step. Learn how to model digital twins using the Thing Modeler, configure and onboard devices, define rules and actions, export IoT data to SAP Analytics Cloud, and more. c. Business Use Cases See IoT in action with practical use cases. Consider challenges and best practices for SAP Leonardo Internet of Things and SAP Edge Services so that your business is prepared to make the most of the IoT. Highlights Include: 1) SAP Leonardo Internet of Things 2) SAP Edge Services 3) SAP Cloud Platform Internet of Things 4) Application modeling 5) Digital twins 6) Device connectivity 7) Rules and actions 8) Analytics 9) Configuration 10) Interoperability 11) Use cases

This book which focusses on mechanics, waves and statistics, describes recent developments in the application of differential geometry, particularly symplectic geometry, to the foundations of broad areas of physics. Throughout the book, intuitive descriptions and diagrams are used to elucidate the mathematical theory. It develops a coordinate-free framework for perturbation theory and uses this to show how underlying symplectic structures arise from physical asymptotes. It describes a remarkable parity between classical mechanics which arises asymptotically from quantum mechanics and classical thermodynamics which arises asymptotically from statistical mechanics. Included here is a section with one hundred unanswered questions for further research.

This guide introduces readers to the fundamentals of cloud computing with SAP technologies and applications and dives deep into SAP S/4HANA Cloud, essentials edition, formerly known as SAP S/4HANA Public Cloud or multitenant edition (MTE). Explore and evaluate SAP S/4HANA deployment models and compare and contrast the similarities and differences between them. Obtain a multi-dimensional understanding of SAP S/4HANA Cloud, essentials edition, including business functionality coverage, landscape and systems, configuration and extensions, release strategy, user experience, and the implementation framework, SAP Activate. Walk through the detailed criteria and arm yourself with the information you need to make a fully informed decision on whether S/4HANA Cloud, essentials edition is the right choice for your organization. - Basics of cloud computing in SAP and SAP Cloud strategy - Analysis of SAP S/4HANA deployment models - DNA of S/4HANA Cloud, essentials edition - SAP S/4HANA Cloud assessment criteria and considerations

ICICCS 2020

Implementing Machine Learning with SAP S/4HANA

Cognitive Computing Fundamentals for Better Decision Making

Algorithmen, Plattformen und Anwendungsszenarien

Innovation with Purpose

Künstliche Intelligenz für Business Analytics

Você gostaria de entender os fundamentos básicos do software SAP sem ter que ler 400 ou mais páginas? Sim? Então, este livro foi feito para você! Seus autores enfatizam o essencial e deixam de lado os detalhes desnecessários para iniciantes. Com exemplos simples e diretos, conheça os fundamentos do sistema SAP Enterprise Resource Planning (ERP), incluindo navegação, transações, unidades organizacionais e dados mestres. Vídeos instrutivos ajudam você a experimentar o software SAP sem requerer acesso ao sistema SAP. Obtenha uma visão geral do portfólio existente de produtos SAP além do SAP ERP. Saiba mais sobre o lado técnico do SAP ERP, incluindo soluções do setor industrial, ABAP e enhancement packages (EHP). Veja uma pequena introdução a BI, CRM, SRM, SCM, GRC, NetWeaver, SuccessFactors e HANA. Descomplique os acrônimos de SAP e obtenha esclarecimento sobre a finalidade de diferentes produtos SAP. - Aprenda a navegar no SAP ERP - Conheça o básico do SAP, incluindo transações, unidades organizacionais e dados mestres - Assista a vídeos instrutivos com exemplos simples e diretos - Obtenha uma visão geral dos produtos SAP e novas tendências de desenvolvimento Com a solução Localização Brasil, a SAP oferece diversas configurações e transações a fim de atender aos requisitos de cálculo de impostos, geração de nota fiscal de mercadoria e serviços, bem como a geração do conhecimento de transporte e relatórios legais específicos para o Brasil.