

Predictive Analytics With Microsoft Azure Machine Learning Build And Deploy Actionable Solutions In Minutes

Eventually, you will very discover a supplementary experience and attainment by spending more cash. nevertheless when? get you tolerate that you require to acquire those all needs in the manner of having significantly cash? Why dont you attempt to acquire something basic in the beginning? Thats something that will lead you to comprehend even more just about the globe, experience, some places, in imitation of history, amusement, and a lot more?

It is your extremely own become old to doing reviewing habit. accompanied by guides you could enjoy now is **predictive analytics with microsoft azure machine learning build and deploy actionable solutions in minutes** below.

Engineering MLOps -
Emmanuel Raj 2021-04-19
Get up and running with machine learning life cycle management and implement MLOps in your organization
Key Features Become well-

versed with MLOps techniques to monitor the quality of machine learning models in production Explore a monitoring framework for ML models in production and learn about end-to-end traceability

for deployed models Perform CI/CD to automate new implementations in ML pipelines Book Description Engineering MLps presents comprehensive insights into MLOps coupled with real-world examples in Azure to help you to write programs, train robust and scalable ML models, and build ML pipelines to train and deploy models securely in production. The book begins by familiarizing you with the MLOps workflow so you can start writing programs to train ML models. Then you'll then move on to explore options for serializing and packaging ML models post-training to deploy them to facilitate machine learning inference, model interoperability, and end-to-end model traceability. You'll learn how to build ML pipelines, continuous integration and continuous delivery (CI/CD) pipelines, and monitor pipelines to systematically build, deploy, monitor, and govern ML solutions for businesses and industries. Finally, you'll apply the knowledge you've gained to

build real-world projects. By the end of this ML book, you'll have a 360-degree view of MLOps and be ready to implement MLOps in your organization. What you will learn Formulate data governance strategies and pipelines for ML training and deployment Get to grips with implementing ML pipelines, CI/CD pipelines, and ML monitoring pipelines Design a robust and scalable microservice and API for test and production environments Curate your custom CD processes for related use cases and organizations Monitor ML models, including monitoring data drift, model drift, and application performance Build and maintain automated ML systems Who this book is for This MLOps book is for data scientists, software engineers, DevOps engineers, machine learning engineers, and business and technology leaders who want to build, deploy, and maintain ML systems in production using MLOps principles and

techniques. Basic knowledge of machine learning is necessary to get started with this book.

Limitless Analytics with Azure

Synapse - Prashant Kumar Mishra 2021-06-18

Leverage the Azure analytics platform's key analytics services to deliver unmatched intelligence for your data Key Features Learn to ingest, prepare, manage, and serve data for immediate business requirements Bring enterprise data warehousing and big data analytics together to gain insights from your data Develop end-to-end analytics solutions using Azure Synapse Book Description Azure Synapse Analytics, which Microsoft describes as the next evolution of Azure SQL Data Warehouse, is a limitless analytics service that brings enterprise data warehousing and big data analytics together. With this book, you'll learn how to discover insights from your data effectively using this platform. The book starts with an overview of Azure Synapse Analytics, its architecture, and how it can be used to improve

business intelligence and machine learning capabilities. Next, you'll go on to choose and set up the correct environment for your business problem. You'll also learn a variety of ways to ingest data from various sources and orchestrate the data using transformation techniques offered by Azure Synapse. Later, you'll explore how to handle both relational and non-relational data using the SQL language. As you progress, you'll perform real-time streaming and execute data analysis operations on your data using various languages, before going on to apply ML techniques to derive accurate and granular insights from data. Finally, you'll discover how to protect sensitive data in real time by using security and privacy features. By the end of this Azure book, you'll be able to build end-to-end analytics solutions while focusing on data prep, data management, data warehousing, and AI tasks. What you will learn Explore the necessary considerations for data

ingestion and orchestration while building analytical pipelines Understand pipelines and activities in Synapse pipelines and use them to construct end-to-end data-driven workflows Query data using various coding languages on Azure Synapse Focus on Synapse SQL and Synapse Spark Manage and monitor resource utilization and query activity in Azure Synapse Connect Power BI workspaces with Azure Synapse and create or modify reports directly from Synapse Studio Create and manage IP firewall rules in Azure Synapse Who this book is for This book is for data architects, data scientists, data engineers, and business analysts who are looking to get up and running with the Azure Synapse Analytics platform. Basic knowledge of data warehousing will be beneficial to help you understand the concepts covered in this book more effectively.

SQL Server 2017 Machine Learning Services with R - Julie Koesmarno 2018-02-27

Develop and run efficient R scripts and predictive models for SQL Server 2017 Key Features Learn how you can combine the power of R and SQL Server 2017 to build efficient, cost-effective data science solutions Leverage the capabilities of R Services to perform advanced analytics--from data exploration to predictive modeling A quick primer with practical examples to help you get up- and- running with SQL Server 2017 Machine Learning Services with R, as part of database solutions with continuous integration / continuous delivery. Book Description R Services was one of the most anticipated features in SQL Server 2016, improved significantly and rebranded as SQL Server 2017 Machine Learning Services. Prior to SQL Server 2016, many developers and data scientists were already using R to connect to SQL Server in siloed environments that left a lot to be desired, in order to do additional data analysis, superseding SSAS Data Mining

or additional CLR programming functions. With R integrated within SQL Server 2017, these developers and data scientists can now benefit from its integrated, effective, efficient, and more streamlined analytics environment. This book gives you foundational knowledge and insights to help you understand SQL Server 2017 Machine Learning Services with R. First and foremost, the book provides practical examples on how to implement, use, and understand SQL Server and R integration in corporate environments, and also provides explanations and underlying motivations. It covers installing Machine Learning Services; maintaining, deploying, and managing code; and monitoring your services. Delving more deeply into predictive modeling and the RevoScaleR package, this book also provides insights into operationalizing code and exploring and visualizing data. To complete the journey, this book covers the new features in SQL Server 2017 and how

they are compatible with R, amplifying their combined power. What you will learn Get an overview of SQL Server 2017 Machine Learning Services with R Manage SQL Server Machine Learning Services from installation to configuration and maintenance Handle and operationalize R code Explore RevoScaleR R algorithms and create predictive models Deploy, manage, and monitor database solutions with R Extend R with SQL Server 2017 features Explore the power of R for database administrators Who this book is for This book is for data analysts, data scientists, and database administrators with some or no experience in R but who are eager to easily deliver practical data science solutions in their day-to-day work (or future projects) using SQL Server.

[Mastering Azure Machine Learning](#) - Christoph Körner
2020-04-30

Master expert techniques for building automated and highly scalable end-to-end machine learning models and pipelines

in Azure using TensorFlow, Spark, and Kubernetes Key Features Make sense of data on the cloud by implementing advanced analytics Train and optimize advanced deep learning models efficiently on Spark using Azure Databricks Deploy machine learning models for batch and real-time scoring with Azure Kubernetes Service (AKS) Book Description The increase being seen in data volume today requires distributed systems, powerful algorithms, and scalable cloud infrastructure to compute insights and train and deploy machine learning (ML) models. This book will help you improve your knowledge of building ML models using Azure and end-to-end ML pipelines on the cloud. The book starts with an overview of an end-to-end ML project and a guide on how to choose the right Azure service for different ML tasks. It then focuses on Azure Machine Learning and takes you through the process of data experimentation, data preparation, and feature

engineering using Azure Machine Learning and Python. You'll learn advanced feature extraction techniques using natural language processing (NLP), classical ML techniques, and the secrets of both a great recommendation engine and a performant computer vision model using deep learning methods. You'll also explore how to train, optimize, and tune models using Azure Automated Machine Learning and HyperDrive, and perform distributed training on Azure. Then, you'll learn different deployment and monitoring techniques using Azure Kubernetes Services with Azure Machine Learning, along with the basics of MLOps—DevOps for ML to automate your ML process as CI/CD pipeline. By the end of this book, you'll have mastered Azure Machine Learning and be able to confidently design, build and operate scalable ML pipelines in Azure. What you will learn Setup your Azure Machine Learning workspace for data experimentation and visualization Perform ETL, data

preparation, and feature extraction using Azure best practices Implement advanced feature extraction using NLP and word embeddings Train gradient boosted tree-ensembles, recommendation engines and deep neural networks on Azure Machine Learning Use hyperparameter tuning and Azure Automated Machine Learning to optimize your ML models Employ distributed ML on GPU clusters using Horovod in Azure Machine Learning Deploy, operate and manage your ML models at scale Automated your end-to-end ML process as CI/CD pipelines for MLOps Who this book is for This machine learning book is for data professionals, data analysts, data engineers, data scientists, or machine learning developers who want to master scalable cloud-based machine learning architectures in Azure. This book will help you use advanced Azure services to build intelligent machine learning applications. A basic understanding of Python and working knowledge of machine

learning are mandatory.

Data Science Solutions on Azure - Julian Soh 2021-01-02

Understand and learn the skills needed to use modern tools in Microsoft Azure. This book discusses how to practically apply these tools in the industry, and help drive the transformation of organizations into a knowledge and data-driven entity. It provides an end-to-end understanding of data science life cycle and the techniques to efficiently productionize workloads. The book starts with an introduction to data science and discusses the statistical techniques data scientists should know. You'll then move on to machine learning in Azure where you will review the basics of data preparation and engineering, along with Azure ML service and automated machine learning. You'll also explore Azure Databricks and learn how to deploy, create and manage the same. In the final chapters you'll go through machine learning operations in Azure followed by the practical

implementation of artificial intelligence through machine learning. Data Science Solutions on Azure will reveal how the different Azure services work together using real life scenarios and how-to-build solutions in a single comprehensive cloud ecosystem. What You'll Learn Understand big data analytics with Spark in Azure Databricks Integrate with Azure services like Azure Machine Learning and Azure Synaps Deploy, publish and monitor your data science workloads with MLOps Review data abstraction, model management and versioning with GitHub Who This Book Is For Data Scientists looking to deploy end-to-end solutions on Azure with latest tools and techniques.

Practical Weak Supervision -

Wee Hyong Tok 2021-09-30

Most data scientists and engineers today rely on quality labeled data to train machine learning models. But building a training set manually is time-consuming and expensive, leaving many companies with unfinished ML projects. There's

a more practical approach. In this book, Wee Hyong Tok, Amit Bahree, and Senja Filipi show you how to create products using weakly supervised learning models. You'll learn how to build natural language processing and computer vision projects using weakly labeled datasets from Snorkel, a spin-off from the Stanford AI Lab. Because so many companies have pursued ML projects that never go beyond their labs, this book also provides a guide on how to ship the deep learning models you build. Get up to speed on the field of weak supervision, including ways to use it as part of the data science process Use Snorkel AI for weak supervision and data programming Get code examples for using Snorkel to label text and image datasets Use a weakly labeled dataset for text and image classification Learn practical considerations for using Snorkel with large datasets and using Spark clusters to scale labeling

Microsoft Azure Essentials

Azure Automation - Michael McKeown 2015-04-10
Microsoft Azure Essentials from Microsoft Press is a series of free ebooks designed to help you advance your technical skills with Microsoft Azure. The second ebook in the series, Microsoft Azure Essentials: Azure Automation, introduces a fairly new feature of Microsoft Azure called Azure Automation. Using a highly scalable workflow execution environment, Azure Automation allows you to orchestrate frequent deployment and life cycle management tasks using runbooks based on Windows PowerShell Workflow functionality. These runbooks are stored in and backed up by Azure. By automating runbooks, you can greatly minimize the occurrence of errors when carrying out repeated tasks and process automation. Watch Microsoft Press's blog and Twitter (@MicrosoftPress) to learn about other free ebooks in the Microsoft Azure Essentials series.

Self-Service AI with Power BI Desktop - Markus Ehrenmueller-Jensen 2020-10-01
This book explains how you can enrich the data you have loaded into Power BI Desktop by accessing a suite of Artificial Intelligence (AI) features. These AI features are built into Power BI Desktop and help you to gain new insights from existing data. Some of the features are automated and are available to you at the click of a button or through writing Data Analysis Expressions (DAX). Other features are available through writing code in either the R, Python, or M languages. This book opens up the entire suite of AI features to you with clear examples showing when they are best applied and how to invoke them on your own datasets. No matter if you are a business user, analyst, or data scientist – Power BI has AI capabilities tailored to you. This book helps you learn what types of insights Power BI is capable of delivering automatically. You will learn how to integrate and leverage

the use of the R and Python languages for statistics, how to integrate with Cognitive Services and Azure Machine Learning Services when loading data, how to explore your data by asking questions in plain English ... and more! There are AI features for discovering your data, characterizing unexplored datasets, and building what-if scenarios. There's much to like and learn from this book whether you are a newcomer to Power BI or a seasoned user. Power BI Desktop is a freely available tool for visualization and analysis. This book helps you to get the most from that tool by exploiting some of its latest and most advanced features. What You Will Learn Ask questions in natural language and get answers from your data Let Power BI explain why a certain data point differs from the rest Have Power BI show key influencers over categories of data Access artificial intelligence features available in the Azure cloud Walk the same drill down path in different parts of your

hierarchy Load visualizations to add smartness to your reports Simulate changes in data and immediately see the consequences Know your data, even before you build your first report Create new columns by giving examples of the data that you need Transform and visualize your data with the help of R and Python scripts Who This Book Is For For the enthusiastic Power BI user who wants to apply state-of-the-art artificial intelligence (AI) features to gain new insights from existing data. For end-users and IT professionals who are not shy of jumping into a new world of machine learning and are ready to make that step and take a deeper look into their data. For those wanting to step up their game from doing simple reporting and visualizations by making the move into diagnostic and predictive analysis.

Hands-On Machine Learning with Azure - Thomas K Abraham 2018-10-31
Implement machine learning, cognitive services, and artificial intelligence solutions

by leveraging Azure cloud technologies

Key Features Learn advanced concepts in Azure ML and the Cortana Intelligence Suite architecture

Explore ML Server using SQL Server and HDInsight capabilities Implement various tools in Azure to build and deploy machine learning models

Book Description Implementing Machine learning (ML) and Artificial Intelligence (AI) in the cloud had not been possible earlier due to the lack of processing power and storage. However, Azure has created ML and AI services that are easy to implement in the cloud. Hands-On Machine Learning with Azure teaches you how to perform advanced ML projects in the cloud in a cost-effective way. The book begins by covering the benefits of ML and AI in the cloud. You will then explore Microsoft's Team Data Science Process to establish a repeatable process for successful AI development and implementation. You will also gain an understanding of

AI technologies available in Azure and the Cognitive Services APIs to integrate them into bot applications. This book lets you explore prebuilt templates with Azure Machine Learning Studio and build a model using canned algorithms that can be deployed as web services. The book then takes you through a preconfigured series of virtual machines in Azure targeted at AI development scenarios. You will get to grips with the ML Server and its capabilities in SQL and HDInsight. In the concluding chapters, you'll integrate patterns with other non-AI services in Azure. By the end of this book, you will be fully equipped to implement smart cognitive actions in your models. What you will learn

Discover the benefits of leveraging the cloud for ML and AI

Use Cognitive Services APIs to build intelligent bots

Build a model using canned algorithms from Microsoft and deploy it as a web service

Deploy virtual machines in AI development scenarios

Apply R, Python, SQL

Server, and Spark in AzureBuild and deploy deep learning solutions with CNTK, MMLSpark, and TensorFlowImplement model retraining in IoT, Streaming, and Blockchain solutionsExplore best practices for integrating ML and AI functions with ADLA and logic appsWho this book is for If you are a data scientist or developer familiar with Azure ML and cognitive services and want to create smart models and make sense of data in the cloud, this book is for you. You'll also find this book useful if you want to bring powerful machine learning services into your cloud applications. Some experience with data manipulation and processing, using languages like SQL, Python, and R, will aid in understanding the concepts covered in this book

Implementing Azure Cloud Design Patterns - Oliver Michalski 2018-01-29

A hands-on guide to mastering Azure cloud design patterns and best practices. Key Features Master architectural

design patterns in Azure. Get hands-on with implementing design patterns. Implement best practices for improving efficiency and security Book Description A well designed cloud infrastructure covers factors such as consistency, maintenance, simplified administration and development, and reusability. Hence it is important to choose the right architectural pattern as it has a huge impact on the quality of cloud-hosted services. This book covers all Azure design patterns and functionalities to help you build your cloud infrastructure so it fits your system requirements. This book initially covers design patterns that are focused on factors such as availability and data management/monitoring. Then the focus shifts to complex design patterns such as multitasking, improving scalability, valet keys, and so on, with practical use cases. The book also supplies best practices to improve the security and performance of your cloud. By the end of this

book, you will thoroughly be familiar with the different design and architectural patterns available with Windows Azure and capable of choosing the best pattern for your system. What you will learn

Learn to organize Azure access Design the core areas of the Azure Execution Model Work with storage and data management Create a health endpoint monitoring pattern Automate early detection of anomalies Identify and secure Azure features Who this book is for This book is targeted at cloud architects and cloud solution providers who are looking for an extensive guide to implementing different patterns for the deployment and maintenance of services in Microsoft Azure. Prior experience with Azure is required as the book is completely focused on design patterns.

Machine Learning with Dynamics 365 and Power Platform - Aurelien Clere
2022-01-06

Apply cutting-edge AI techniques to your Dynamics

365 environment to create new solutions to old business problems In Machine Learning with Dynamics 365 and Power Platform: The Ultimate Guide to Apply Predictive Analytics, an accomplished team of digital and data analytics experts delivers a practical and comprehensive discussion of how to integrate AI Builder with Dataverse and Dynamics 365 to create real-world business solutions. It also walks you through how to build powerful machine learning models using Azure Data Lake, Databricks, Azure Synapse Analytics. The book is filled with clear explanations, visualizations, and working examples that get you up and running in your development of supervised, unsupervised, and reinforcement learning techniques using Microsoft machine learning tools and technologies. These strategies will transform your business verticals, reducing costs and manual processes in finance and operations, retail, telecommunications, and manufacturing industries. The

authors demonstrate: What machine learning is all about and how it can be applied to your organization's Dynamics 365 and Power Platform Projects The creation and management of environments for development, testing, and production of a machine learning project How adopting machine learning techniques will redefine the future of your ERP/CRM system Perfect for Technical Consultants, software developers, and solution architects, Machine Learning with Dynamics 365 and Power Platform is also an indispensable guide for Chief Technology Officers seeking an intuitive resource for how to implement machine learning in modern business applications to solve real-world problems.

Cloud Analytics with

Microsoft Azure - Has Altaiar
2019-11-26

Leverage the power of Azure to get efficient data insights from your big data in real time Key Features Explore the basics of cloud analytics using Azure Discover different ways to process and visualize your data

easily Learn to use Azure Synapse Analytics (formerly known as Azure SQL Data Warehouse) to derive real-time customer insights Book Description With data being generated at an exponential speed, organizations all over the world are migrating their infrastructure to the cloud. Application management becomes much easier when you use a cloud platform to build, manage, and deploy your services and applications. Cloud Analytics with Microsoft Azure covers all that you need to extract useful insights from your data. You'll explore the power of data with big data analytics, the Internet of Things (IoT), machine learning, artificial intelligence, and DataOps. You'll also delve into data analytics by studying use cases that focus on creating actionable insights from near-real-time data. As you advance, you'll learn to build an end-to-end analytics pipeline on the cloud with machine learning and deep learning concepts. By the end of this book, you'll have developed a solid

understanding of data analytics with Azure and its practical implementation. What you will learn Explore the concepts of modern data warehouses and data pipelines Discover different design considerations while applying a cloud analytics solution Design an end-to-end analytics pipeline on the cloud Differentiate between structured, semi-structured, and unstructured data Choose a cloud-based service for your data analytics solutions Use Azure services to ingest, store and analyze data of any scale Who this book is for If you're planning to adopt the cloud analytics model for your business, this book will help you understand the design and business considerations that you must keep in mind. Though not necessary, a basic understanding of data analytics concepts such as data streaming, data types, the machine learning life cycle, and Docker containers will help you get the most out of the book.

Stream Analytics with Microsoft Azure - Anindita

Basak 2017-11-23

Develop and manage effective real-time streaming solutions by leveraging the power of Microsoft Azure About This Book* Analyze your data from various sources using Microsoft Azure Stream Analytics* Develop, manage and automate your stream analytics solution with Microsoft Azure* A practical guide to real-time event processing and performing analytics on the cloud Who This Book Is For If you are looking for a resource that teaches you how to process continuous streams of data in real-time, this book is what you need. A basic understanding of the concepts in analytics is all you need to get started with this book What You Will Learn* Perform real-time event processing with Azure Stream Analysis* Incorporate the features of Big Data Lambda architecture pattern in real-time data processing* Design a streaming pipeline for storage and batch analysis* Implement data transformation and computation activities over

stream of events* Automate your streaming pipeline using Powershell and the .NET SDK* Integrate your streaming pipeline with popular Machine Learning and Predictive Analytics modelling algorithms* Monitor and troubleshoot your Azure Streaming jobs effectively

In Detail Microsoft Azure is a very popular cloud computing service used by many organizations around the world. Its latest analytics offering, Stream Analytics, allows you to process and get actionable insights from different kinds of data in real-time. This book is your guide to understanding the basics of how Azure Stream Analytics works, and building your own analytics solution using its capabilities. You will start with understanding what Stream Analytics is, and why it is a popular choice for getting real-time insights from data. Then, you will be introduced to Azure Stream Analytics, and see how you can use the tools and functions in Azure to develop your own Streaming Analytics.

Over the course of the book, you will be given comparative analytic guidance on using Azure Streaming with other Microsoft Data Platform resources such as Big Data Lambda Architecture integration for real time data analysis and differences of scenarios for architecture designing with Azure HDInsight Hadoop clusters with Storm or Stream Analytics. The book also shows you how you can manage, monitor, and scale your solution for optimal performance. By the end of this book, you will be well-versed in using Azure Stream Analytics to develop an efficient analytics solution that can work with any type of data.

Style and approach A comprehensive guidance on developing real-time event processing with Azure Stream Analysis

Semantic Systems. The Power of AI and Knowledge Graphs
Maribel Acosta 2019-11-04

This open access book constitutes the refereed proceedings of the 15th International Conference on

Semantic Systems, SEMANTiCS 2019, held in Karlsruhe, Germany, in September 2019. The 20 full papers and 8 short papers presented in this volume were carefully reviewed and selected from 88 submissions. They cover topics such as: web semantics and linked (open) data; machine learning and deep learning techniques; semantic information management and knowledge integration; terminology, thesaurus and ontology management; data mining and knowledge discovery; semantics in blockchain and distributed ledger technologies.

Practical Automated Machine

Learning on Azure - Deepak Mukunthu 2019-09-23

Develop smart applications without spending days and weeks building machine-learning models. With this practical book, you'll learn how to apply automated machine learning (AutoML), a process that uses machine learning to help people build machine learning models. Deepak

Mukunthu, Parashar Shah, and Wee Hyong Tok provide a mix of technical depth, hands-on examples, and case studies that show how customers are solving real-world problems with this technology. Building machine-learning models is an iterative and time-consuming process. Even those who know how to create ML models may be limited in how much they can explore. Once you complete this book, you'll understand how to apply AutoML to your data right away. Learn how companies in different industries are benefiting from AutoML Get started with AutoML using Azure Explore aspects such as algorithm selection, auto featurization, and hyperparameter tuning Understand how data analysts, BI professions, developers can use AutoML in their familiar tools and experiences Learn how to get started using AutoML for use cases including classification, regression, and forecasting.

Microsoft Big Data Solutions -

Adam Jorgensen 2014-02-24

Tap the power of Big Data with Microsoft technologies Big Data is here, and Microsoft's new Big Data platform is a valuable tool to help your company get the very most out of it. This timely book shows you how to use HDInsight along with HortonWorks Data Platform for Windows to store, manage, analyze, and share Big Data throughout the enterprise. Focusing primarily on Microsoft and HortonWorks technologies but also covering open source tools, Microsoft Big Data Solutions explains best practices, covers on-premises and cloud-based solutions, and features valuable case studies. Best of all, it helps you integrate these new solutions with technologies you already know, such as SQL Server and Hadoop. Walks you through how to integrate Big Data solutions in your company using Microsoft's HDInsight Server, HortonWorks Data Platform for Windows, and open source tools Explores both on-premises and cloud-based solutions Shows how to store, manage, analyze, and

share Big Data through the enterprise Covers topics such as Microsoft's approach to Big Data, installing and configuring HortonWorks Data Platform for Windows, integrating Big Data with SQL Server, visualizing data with Microsoft and HortonWorks BI tools, and more Helps you build and execute a Big Data plan Includes contributions from the Microsoft and HortonWorks Big Data product teams If you need a detailed roadmap for designing and implementing a fully deployed Big Data solution, you'll want Microsoft Big Data Solutions.

Predictive Analytics For Dummies - Anasse Bari

2014-03-06

Combine business sense, statistics, and computers in a new and intuitive way, thanks to Big Data Predictive analytics is a branch of data mining that helps predict probabilities and trends. Predictive Analytics For Dummies explores the power of predictive analytics and how you can use it to make valuable predictions for your business, or in fields such as advertising,

fraud detection, politics, and others. This practical book does not bog you down with loads of mathematical or scientific theory, but instead helps you quickly see how to use the right algorithms and tools to collect and analyze data and apply it to make predictions. Topics include using structured and unstructured data, building models, creating a predictive analysis roadmap, setting realistic goals, budgeting, and much more. Shows readers how to use Big Data and data mining to discover patterns and make predictions for tech-savvy businesses Helps readers see how to shepherd predictive analytics projects through their companies Explains just enough of the science and math, but also focuses on practical issues such as protecting project budgets, making good presentations, and more Covers nuts-and-bolts topics including predictive analytics basics, using structured and unstructured data, data mining, and algorithms and

techniques for analyzing data Also covers clustering, association, and statistical models; creating a predictive analytics roadmap; and applying predictions to the web, marketing, finance, health care, and elsewhere Propose, produce, and protect predictive analytics projects through your company with Predictive Analytics For Dummies. [Effective Amazon Machine Learning](#) - Alexis Perrier 2017-04-25 Learn to leverage Amazon's powerful platform for your predictive analytics needs About This Book Create great machine learning models that combine the power of algorithms with interactive tools without worrying about the underlying complexity Learn the What's next? of machine learning—machine learning on the cloud—with this unique guide Create web services that allow you to perform affordable and fast machine learning on the cloud Who This Book Is For This book is intended for data scientists and managers of predictive

analytics projects; it will teach beginner- to advanced-level machine learning practitioners how to leverage Amazon Machine Learning and complement their existing Data Science toolbox. No substantive prior knowledge of Machine Learning, Data Science, statistics, or coding is required. What You Will Learn

- Learn how to use the Amazon Machine Learning service from scratch for predictive analytics
- Gain hands-on experience of key Data Science concepts
- Solve classic regression and classification problems
- Run projects programmatically via the command line and the Python SDK
- Leverage the Amazon Web Service ecosystem to access extended data sources
- Implement streaming and advanced projects

In Detail Predictive analytics is a complex domain requiring coding skills, an understanding of the mathematical concepts underpinning machine learning algorithms, and the ability to create compelling data visualizations. Following AWS

simplifying Machine learning, this book will help you bring predictive analytics projects to fruition in three easy steps: data preparation, model tuning, and model selection. This book will introduce you to the Amazon Machine Learning platform and will implement core data science concepts such as classification, regression, regularization, overfitting, model selection, and evaluation. Furthermore, you will learn to leverage the Amazon Web Service (AWS) ecosystem for extended access to data sources, implement realtime predictions, and run Amazon Machine Learning projects via the command line and the Python SDK. Towards the end of the book, you will also learn how to apply these services to other problems, such as text mining, and to more complex datasets. Style and approach This book will include use cases you can relate to. In a very practical manner, you will explore the various capabilities of Amazon Machine Learning services, allowing you to implementing

them in your environment with consummate ease.

Azure Data Scientist Associate Certification

Guide - Andreas Botsikas
2021-12-03

Develop the skills you need to run machine learning workloads in Azure and pass the DP-100 exam with ease. Key Features: Create end-to-end machine learning training pipelines, with or without code. Track experiment progress using the cloud-based MLflow-compatible process of Azure ML services. Operationalize your machine learning models by creating batch and real-time endpoints. **Book Description** The Azure Data Scientist Associate Certification Guide helps you acquire practical knowledge for machine learning experimentation on Azure. It covers everything you need to pass the DP-100 exam and become a certified Azure Data Scientist Associate. Starting with an introduction to data science, you'll learn the terminology that will be used throughout the book and then move on to the Azure Machine

Learning (Azure ML) workspace. You'll discover the studio interface and manage various components, such as data stores and compute clusters. Next, the book focuses on no-code and low-code experimentation, and shows you how to use the Automated ML wizard to locate and deploy optimal models for your dataset. You'll also learn how to run end-to-end data science experiments using the designer provided in Azure ML Studio. You'll then explore the Azure ML Software Development Kit (SDK) for Python and advance to creating experiments and publishing models using code. The book also guides you in optimizing your model's hyperparameters using Hyperdrive before demonstrating how to use responsible AI tools to interpret and debug your models. Once you have a trained model, you'll learn to operationalize it for batch or real-time inferences and monitor it in production. By the end of this Azure certification study guide, you'll have gained

the knowledge and the practical skills required to pass the DP-100 exam. What you will learn

Create a working environment for data science workloads on Azure

Run data experiments using Azure Machine Learning services

Create training and inference pipelines using the designer or code

Discover the best model for your dataset using Automated ML

Use hyperparameter tuning to optimize trained models

Deploy, use, and monitor models in production

Interpret the predictions of a trained model

Who this book is for

This book is for developers who want to infuse their applications with AI capabilities and data scientists looking to scale their machine learning experiments in the Azure cloud. Basic knowledge of Python is needed to follow the code samples used in the book. Some experience in training machine learning models in Python using common frameworks like scikit-learn will help you understand the content more

easily.

Machine Learning with SAS

Viya - SAS Institute Inc.

2020-05-29

Master machine learning with SAS Viya! Machine learning can feel intimidating for new practitioners. Machine Learning with SAS Viya provides everything you need to know to get started with machine learning in SAS Viya, including decision trees, neural networks, and support vector machines. The analytics life cycle is covered from data preparation and discovery to deployment. Working with open-source code? Machine Learning with SAS Viya has you covered – step-by-step instructions are given on how to use SAS Model Manager tools with open source. SAS Model Studio features are highlighted to show how to carry out machine learning in SAS Viya. Demonstrations, practice tasks, and quizzes are included to help sharpen your skills. In this book, you will learn about: Supervised and unsupervised machine learning

Data preparation and dealing

with missing and unstructured data Model building and selection Improving and optimizing models Model deployment and monitoring performance

Machine Learning with Microsoft Technologies Leila Etaati 2019-06-12

Know how to do machine learning with Microsoft technologies. This book teaches you to do predictive, descriptive, and prescriptive analyses with Microsoft Power BI, Azure Data Lake, SQL Server, Stream Analytics, Azure Databricks, HD Insight, and more. The ability to analyze massive amounts of real-time data and predict future behavior of an organization is critical to its long-term success. Data science, and more specifically machine learning (ML), is today's game changer and should be a key building block in every company's strategy. Managing a machine learning process from business understanding, data acquisition and cleaning, modeling, and deployment in each tool is a

valuable skill set. Machine Learning with Microsoft Technologies is a demo-driven book that explains how to do machine learning with Microsoft technologies. You will gain valuable insight into designing the best architecture for development, sharing, and deploying a machine learning solution. This book simplifies the process of choosing the right architecture and tools for doing machine learning based on your specific infrastructure needs and requirements. Detailed content is provided on the main algorithms for supervised and unsupervised machine learning and examples show ML practices using both R and Python languages, the main languages inside Microsoft technologies. What You'll Learn Choose the right Microsoft product for your machine learning solution Create and manage Microsoft's tool environments for development, testing, and production of a machine learning project Implement and deploy supervised and unsupervised learning in

Microsoft products Set up Microsoft Power BI, Azure Data Lake, SQL Server, Stream Analytics, Azure Databricks, and HD Insight to perform machine learning Set up a data science virtual machine and test-drive installed tools, such as Azure ML Workbench, Azure ML Server Developer, Anaconda Python, Jupyter Notebook, Power BI Desktop, Cognitive Services, machine learning and data analytics tools, and more Architect a machine learning solution factoring in all aspects of self service, enterprise, deployment, and sharing Who This Book Is For Data scientists, data analysts, developers, architects, and managers who want to leverage machine learning in their products, organization, and services, and make educated, cost-saving decisions about their ML architecture and tool set.

Predictive Analytics with Microsoft Azure Machine Learning 2nd Edition

Valentine Fontana 2015-08-26
Predictive Analytics with

Microsoft Azure Machine Learning, Second Edition is a practical tutorial introduction to the field of data science and machine learning, with a focus on building and deploying predictive models. The book provides a thorough overview of the Microsoft Azure Machine Learning service released for general availability on February 18th, 2015 with practical guidance for building recommenders, propensity models, and churn and predictive maintenance models. The authors use task oriented descriptions and concrete end-to-end examples to ensure that the reader can immediately begin using this new service. The book describes all aspects of the service from data ingress to applying machine learning, evaluating the models, and deploying them as web services. Learn how you can quickly build and deploy sophisticated predictive models with the new Azure Machine Learning from Microsoft. What's New in the Second Edition? Five new chapters

have been added with practical detailed coverage of: Python Integration – a new feature announced February 2015 Data preparation and feature selection Data visualization with Power BI

Recommendation engines
Selling your models on Azure Marketplace

Advanced Analytics in Power BI with R and Python - Ryan Wade 2020-09-05

This easy-to-follow guide provides R and Python recipes to help you learn and apply the top languages in the field of data analytics to your work in Microsoft Power BI. Data analytics expert and author Ryan Wade shows you how to use R and Python to perform tasks that are extremely hard to do, if not impossible, using native Power BI tools without Power BI Premium capacity. For example, you will learn to score Power BI data using custom data science models, including powerful models from Microsoft Cognitive Services. The R and Python languages are powerful complements to Power BI. They

enable advanced data transformation techniques that are difficult to perform in Power BI in its default configuration, but become easier through the application of data wrangling features that languages such as R and Python support. If you are a BI developer, business analyst, data analyst, or a data scientist who wants to push Power BI and transform it from being just a business intelligence tool into an advanced data analytics tool, then this is the book to help you to do that. What You Will Learn Create advanced data visualizations through R using the ggplot2 package Ingest data using R and Python to overcome the limitations of Power Query Apply machine learning models to your data using R and Python Incorporate advanced AI in Power BI via Microsoft Cognitive Services, IBM Watson, and pre-trained models in SQL Server Machine Learning Services Perform string manipulations not otherwise possible in Power BI using R and Python Who This

Book Is For Power users, data analysts, and data scientists who want to go beyond Power BI's built-in functionality to create advanced visualizations, transform data in ways not otherwise supported, and automate data ingestion from sources such as SQL Server and Excel in a more succinct way

Microsoft Azure Essentials - Fundamentals of Azure -

Michael Collier 2015-01-29
Microsoft Azure Essentials from Microsoft Press is a series of free ebooks designed to help you advance your technical skills with Microsoft Azure. The first ebook in the series, Microsoft Azure Essentials: Fundamentals of Azure, introduces developers and IT professionals to the wide range of capabilities in Azure. The authors - both Microsoft MVPs in Azure - present both conceptual and how-to content for key areas, including: Azure Websites and Azure Cloud Services Azure Virtual Machines Azure Storage Azure Virtual Networks Databases Azure Active Directory

Management tools Business scenarios Watch Microsoft Press's blog and Twitter (@MicrosoftPress) to learn about other free ebooks in the "Microsoft Azure Essentials" series.

Briggs - Barry Briggs
2016-01-07

How do you start? How should you build a plan for cloud migration for your entire portfolio? How will your organization be affected by these changes? This book, based on real-world cloud experiences by enterprise IT teams, seeks to provide the answers to these questions. Here, you'll see what makes the cloud so compelling to enterprises; with which applications you should start your cloud journey; how your organization will change, and how skill sets will evolve; how to measure progress; how to think about security, compliance, and business buy-in; and how to exploit the ever-growing feature set that the cloud offers to gain strategic and competitive advantage.
Predictive Analytics with

Microsoft Azure Machine Learning 2nd Edition -

Valentine Fontama 2015-08-19
Predictive Analytics with Microsoft Azure Machine Learning, Second Edition is a practical tutorial introduction to the field of data science and machine learning, with a focus on building and deploying predictive models. The book provides a thorough overview of the Microsoft Azure Machine Learning service released for general availability on February 18th, 2015 with practical guidance for building recommenders, propensity models, and churn and predictive maintenance models. The authors use task oriented descriptions and concrete end-to-end examples to ensure that the reader can immediately begin using this new service. The book describes all aspects of the service from data ingress to applying machine learning, evaluating the models, and deploying them as web services. Learn how you can quickly build and deploy sophisticated predictive models

with the new Azure Machine Learning from Microsoft. What's New in the Second Edition? Five new chapters have been added with practical detailed coverage of: Python Integration - a new feature announced February 2015 Data preparation and feature selection Data visualization with Power BI Recommendation engines Selling your models on Azure Marketplace

Microsoft Azure Essentials Azure Machine Learning -

Jeff Barnes 2015-04-25
Microsoft Azure Essentials from Microsoft Press is a series of free ebooks designed to help you advance your technical skills with Microsoft Azure. This third ebook in the series introduces Microsoft Azure Machine Learning, a service that a developer can use to build predictive analytics models (using training datasets from a variety of data sources) and then easily deploy those models for consumption as cloud web services. The ebook presents an overview of modern data science theory

and principles, the associated workflow, and then covers some of the more common machine learning algorithms in use today. It builds a variety of predictive analytics models using real world data, evaluates several different machine learning algorithms and modeling strategies, and then deploys the finished models as machine learning web services on Azure within a matter of minutes. The ebook also expands on a working Azure Machine Learning predictive model example to explore the types of client and server applications you can create to consume Azure Machine Learning web services. Watch Microsoft Press's blog and Twitter (@MicrosoftPress) to learn about other free ebooks in the Microsoft Azure Essentials series.

[Hands-On Data Warehousing with Azure Data Factory](#) - Christian Coté 2018-05-31
Leverage the power of Microsoft Azure Data Factory v2 to build hybrid data solutions Key Features

Combine the power of Azure Data Factory v2 and SQL Server Integration Services Design and enhance performance and scalability of a modern ETL hybrid solution Interact with the loaded data in data warehouse and data lake using Power BI Book Description ETL is one of the essential techniques in data processing. Given data is everywhere, ETL will always be the vital process to handle data from different sources. Hands-On Data Warehousing with Azure Data Factory starts with the basic concepts of data warehousing and ETL process. You will learn how Azure Data Factory and SSIS can be used to understand the key components of an ETL solution. You will go through different services offered by Azure that can be used by ADF and SSIS, such as Azure Data Lake Analytics, Machine Learning and Databrick's Spark with the help of practical examples. You will explore how to design and implement ETL hybrid solutions using different integration services with a

step-by-step approach. Once you get to grips with all this, you will use Power BI to interact with data coming from different sources in order to reveal valuable insights. By the end of this book, you will not only learn how to build your own ETL solutions but also address the key challenges that are faced while building them. What you will learn

Understand the key components of an ETL solution using Azure Data Factory and Integration Services Design the architecture of a modern ETL hybrid solution Implement ETL solutions for both on-premises and Azure data Improve the performance and scalability of your ETL solution Gain thorough knowledge of new capabilities and features added to Azure Data Factory and Integration Services Who this book is for This book is for you if you are a software professional who develops and implements ETL solutions using Microsoft SQL Server or Azure cloud. It will be an added advantage if you are a software engineer, DW/ETL architect, or

ETL developer, and know how to create a new ETL implementation or enhance an existing one with ADF or SSIS.

Predictive Analytics with Microsoft Azure Machine Learning - Valentine Fontama 2014-11-25

Data Science and Machine Learning are in high demand, as customers are increasingly looking for ways to glean insights from all their data. More customers now realize that Business Intelligence is not enough as the volume, speed and complexity of data now defy traditional analytics tools. While Business Intelligence addresses descriptive and diagnostic analysis, Data Science unlocks new opportunities through predictive and prescriptive analysis. The purpose of this book is to provide a gentle and instructionally organized introduction to the field of data science and machine learning, with a focus on building and deploying predictive models. The book also provides a thorough overview of the Microsoft Azure Machine

Learning service using task oriented descriptions and concrete end-to-end examples, sufficient to ensure the reader can immediately begin using this important new service. It describes all aspects of the service from data ingress to applying machine learning and evaluating the resulting model, to deploying the resulting model as a machine learning web service. Finally, this book attempts to have minimal dependencies, so that you can fairly easily pick and choose chapters to read. When dependencies do exist, they are listed at the start and end of the chapter. The simplicity of this new service from Microsoft will help to take Data Science and Machine Learning to a much broader audience than existing products in this space. Learn how you can quickly build and deploy sophisticated predictive models as machine learning web services with the new Azure Machine Learning service from Microsoft.

Big Data Analytics with Microsoft HDInsight in 24 Hours, Sams Teach Yourself

Manpreet Singh 2015-11-12
Sams Teach Yourself Big Data Analytics with Microsoft HDInsight in 24 Hours In just 24 lessons of one hour or less, Sams Teach Yourself Big Data Analytics with Microsoft HDInsight in 24 Hours helps you leverage Hadoop's power on a flexible, scalable cloud platform using Microsoft's newest business intelligence, visualization, and productivity tools. This book's straightforward, step-by-step approach shows you how to provision, configure, monitor, and troubleshoot HDInsight and use Hadoop cloud services to solve real analytics problems. You'll gain more of Hadoop's benefits, with less complexity—even if you're completely new to Big Data analytics. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success. Practical, hands-on examples show you how to apply what you learn Quizzes and exercises help you test your knowledge and stretch your skills Notes and tips point

out shortcuts and solutions
Learn how to... · Master core
Big Data and NoSQL concepts,
value propositions, and use
cases · Work with key Hadoop
features, such as HDFS2 and
YARN · Quickly install,
configure, and monitor Hadoop
(HDInsight) clusters in the
cloud · Automate provisioning,
customize clusters, install
additional Hadoop projects,
and administer clusters ·
Integrate, analyze, and report
with Microsoft BI and Power BI
· Automate workflows for data
transformation, integration,
and other tasks · Use Apache
HBase on HDInsight · Use
Sqoop or SSIS to move data to
or from HDInsight · Perform R-
based statistical computing on
HDInsight datasets · Accelerate
analytics with Apache Spark ·
Run real-time analytics on
high-velocity data streams ·
Write MapReduce, Hive, and
Pig programs Register your
book at informit.com/register
for convenient access to
downloads, updates, and
corrections as they become
available.

Monetizing Machine Learning -

Manuel Amunategui 2018
Take your Python machine
learning ideas and create
serverless web applications
accessible by anyone with an
Internet connection. Some of
the most popular serverless
cloud providers are covered in
this book - Amazon, Microsoft,
Google, and PythonAnywhere.
You will work through a series
of common Python data science
problems in an increasing
order of complexity. The
practical projects presented in
this book are simple, clear, and
can be used as templates to
jump-start many other types of
projects. You will learn to
create a web application
around numerical or
categorical predictions,
understand the analysis of text,
create powerful and interactive
presentations, serve restricted
access to data, and leverage
web plugins to accept credit
card payments and donations.
You will get your projects into
the hands of the world in no
time. Each chapter follows
three steps: modeling the right
way, designing and developing
a local web application, and

deploying onto a popular and reliable serverless cloud provider. You can easily jump to or skip particular topics in the book. You also will have access to Jupyter notebooks and code repositories for complete versions of the code covered in the book.

Introducing Machine Learning

- Dino Esposito 2020-02-05
Master machine learning concepts and develop real-world solutions Machine learning offers immense opportunities, and Introducing Machine Learning delivers practical knowledge to make the most of them. Dino and Francesco Esposito start with a quick overview of the foundations of artificial intelligence and the basic steps of any machine learning project. Next, they introduce Microsoft's powerful ML.NET library, including capabilities for data processing, training, and evaluation. They present families of algorithms that can be trained to solve real-life problems, as well as deep learning techniques utilizing neural networks. The authors

conclude by introducing valuable runtime services available through the Azure cloud platform and consider the long-term business vision for machine learning. · 14-time Microsoft MVP Dino Esposito and Francesco Esposito help you · Explore what's known about how humans learn and how intelligent software is built · Discover which problems machine learning can address · Understand the machine learning pipeline: the steps leading to a deliverable model · Use AutoML to automatically select the best pipeline for any problem and dataset · Master ML.NET, implement its pipeline, and apply its tasks and algorithms · Explore the mathematical foundations of machine learning · Make predictions, improve decision-making, and apply probabilistic methods · Group data via classification and clustering · Learn the fundamentals of deep learning, including neural network design · Leverage AI cloud services to build better real-world solutions faster
About This Book · For

professionals who want to build machine learning applications: both developers who need data science skills and data scientists who need relevant programming skills · Includes examples of machine learning coding scenarios built using the ML.NET library

Pandas for Everyone - Daniel Y. Chen 2017-12-15

The Hands-On, Example-Rich Introduction to Pandas Data Analysis in Python Today, analysts must manage data characterized by extraordinary variety, velocity, and volume. Using the open source Pandas library, you can use Python to rapidly automate and perform virtually any data analysis task, no matter how large or complex. Pandas can help you ensure the veracity of your data, visualize it for effective decision-making, and reliably reproduce analyses across multiple datasets. Pandas for Everyone brings together practical knowledge and insight for solving real problems with Pandas, even if you're new to Python data analysis. Daniel Y. Chen

introduces key concepts through simple but practical examples, incrementally building on them to solve more difficult, real-world problems. Chen gives you a jumpstart on using Pandas with a realistic dataset and covers combining datasets, handling missing data, and structuring datasets for easier analysis and visualization. He demonstrates powerful data cleaning techniques, from basic string manipulation to applying functions simultaneously across dataframes. Once your data is ready, Chen guides you through fitting models for prediction, clustering, inference, and exploration. He provides tips on performance and scalability, and introduces you to the wider Python data analysis ecosystem. Work with DataFrames and Series, and import or export data Create plots with matplotlib, seaborn, and pandas Combine datasets and handle missing data Reshape, tidy, and clean datasets so they're easier to work with Convert data types and manipulate text strings

Apply functions to scale data manipulations Aggregate, transform, and filter large datasets with groupby Leverage Pandas' advanced date and time capabilities Fit linear models using statsmodels and scikit-learn libraries Use generalized linear modeling to fit models with different response variables Compare multiple models to select the "best" Regularize to overcome overfitting and improve performance Use clustering in unsupervised machine learning

Deep Learning with Azure

Mathew Salvaris 2018-08-24

Get up-to-speed with Microsoft's AI Platform. Learn to innovate and accelerate with open and powerful tools and services that bring artificial intelligence to every data scientist and developer.

Artificial Intelligence (AI) is the new normal. Innovations in deep learning algorithms and hardware are happening at a rapid pace. It is no longer a question of should I build AI into my business, but more about where do I begin and

how do I get started with AI? Written by expert data scientists at Microsoft, Deep Learning with the Microsoft AI Platform helps you with the how-to of doing deep learning on Azure and leveraging deep learning to create innovative and intelligent solutions. Benefit from guidance on where to begin your AI adventure, and learn how the cloud provides you with all the tools, infrastructure, and services you need to do AI. What You'll Learn Become familiar with the tools, infrastructure, and services available for deep learning on Microsoft Azure such as Azure Machine Learning services and Batch AI Use pre-built AI capabilities (Computer Vision, OCR, gender, emotion, landmark detection, and more) Understand the common deep learning models, including convolutional neural networks (CNNs), recurrent neural networks (RNNs), generative adversarial networks (GANs) with sample code and understand how the field is evolving Discover the options

for training and operationalizing deep learning models on Azure Who This Book Is For Professional data scientists who are interested in learning more about deep learning and how to use the Microsoft AI platform. Some experience with Python is helpful.

Getting started with Power Query in Power BI and Excel

- Reza Rad 2021-08-27

Any data analytics solution requires data population and preparation. With the rise of data analytics solutions these years, the need for this data preparation becomes even more essential. Power BI is a helpful data analytics tool that is used worldwide by many users. As a Power BI (or Microsoft BI) developer, it is essential to learn how to prepare the data in the right shape and format needed. You need to learn how to clean the data and build it in the structure that can be modeled easily and used high performant for visualization. Data preparation and transformation is the backend

work. If you consider building a BI system as going to a restaurant and ordering food. The visualization is the food you see on the table nicely presented. The quality, the taste, and everything else comes from the hard work in the kitchen. The part that you don't see or the backend in the world of Power BI is Power Query. You may be already familiar with some other data preparation and data transformation technologies, such as T-SQL, SSIS, Azure Data Factory, Informatica, etc. Power Query is a data transformation engine capable of preparing the data in the format you need. The good news is that to learn Power Query; you don't need to know programming. Power Query is for citizen data engineers. However, this doesn't mean that Power Query is not capable of performing advanced transformation. Unfortunately, because Power Query and data preparation is the kitchen work of the BI system, many Power BI users skip the learning of it and

become aware of it somewhere along their BI project. Once they get familiar with it, they realize there are tons of things they could have implemented easier, faster, and in a much more maintainable way using Power Query. In other words, they learn mastering Power Query is the key skill toward mastering Power BI. We have been working with Power Query since the very early release of that in 2013, named Data Explorer, and wrote blog articles and published videos about it. The number of articles we published under this subject easily exceeds hundreds. Through those articles, some of the fundamentals and key learnings of Power Query are explained. We thought it is good to compile some of them in a book. A good analytics solution combines a good data model, good data preparation, and good analytics and calculations. Reza has written another book about the Basics of modeling in Power BI and a book on Power BI DAX Simplified. This book is

covering the data preparation and transformations aspects of it. This book is for you if you are building a Power BI solution. Even if you are just visualizing the data, preparation and transformations are an essential part of analytics. You do need to have the cleaned and prepared data ready before visualizing it. This book is compiled into a series of two books, which will be followed by a third book later; Getting started with Power Query in Power BI and Excel (this book) Mastering Power Query in Power BI and Excel (already available to be purchased separately) Power Query dataflows (will be published later) Although this book is written for Power BI and all the examples are presented using the Power BI. However, the examples can be easily applied to Excel, Dataflows, and other tools and services using Power Query.

Implementing Microsoft Dynamics 365 for Finance and Operations- Rahul Mohta
2017-09-15

Harness the power of Dynamics 365 Operations and discover all you need to implement it About This Book Master all the necessary tools and resources to evaluate Dynamics 365 for Operations, implement it, and proactively maintain it. Troubleshoot your problems effectively with your Dynamics 365 partner Learn about architecture, deployment choices, integration, configuration and data migration, development, testing, reporting and BI, support, upgrading, and more. Who This Book Is For This book is for technology leaders, project managers solution architects, and consultants who are planning to implement, are in the process of implementing, or are currently upgrading to Dynamics 365 for Operations. This book will help you effectively learn and implement Dynamics 365 for Operations. What You Will Learn Learn about Microsoft Dynamics 365, it's offerings, plans and details of Finance and Operations, Enterprise edition Understand the methodology and the tool,

architecture, and deployment options Effectively plan and manage configurations and data migration, functional design, and technical design Understand integration frameworks, development concepts, best practices, and recommendations while developing new solutions Learn how to leverage intelligence and analytics through Power BI, machine learning, IOT, and Cortana intelligence Master testing, training, going live, upgrading, and how to get support during and after the implementation In Detail Microsoft Dynamics 365 for Finance and Operations, Enterprise edition, is a modern, cloud-first, mobile-first, ERP solution suitable for medium and large enterprise customers. This book will guide you through the entire life cycle of a implementation, helping you avoid common pitfalls while increasing your efficiency and effectiveness at every stage of the project. Starting with the foundations, the book introduces the Microsoft Dynamics 365

offerings, plans, and products. You will be taken through the various methodologies, architectures, and deployments so you can select, implement, and maintain Microsoft Dynamics 365 for Finance and Operations, Enterprise edition. You will delve in-depth into the various phases of implementation: project management, analysis, configuration, data migration, design, development, using Power BI, machine learning, Cortana analytics for intelligence, testing, training, and finally deployment, support cycles, and upgrading. This book focuses on providing you with information about the product and the various concepts and tools, along with real-life examples from the field and guidance that will empower you to execute and implement Dynamics 365 for Finance and Operations, Enterprise edition. Style and approach This book is a step-by-step guide focusing on implementing Dynamics 365 Operations solutions for your organization.

Introducing Microsoft Azure HDInsight - Avkash Chauhan
2014-06-12

Microsoft Azure HDInsight is Microsoft's 100 percent compliant distribution of Apache Hadoop on Microsoft Azure. This means that standard Hadoop concepts and technologies apply, so learning the Hadoop stack helps you learn the HDInsight service. At the time of this writing, HDInsight (version 3.0) uses Hadoop version 2.2 and Hortonworks Data Platform 2.0. In Introducing Microsoft Azure HDInsight, we cover what big data really means, how you can use it to your advantage in your company or organization, and one of the services you can use to do that quickly—specifically, Microsoft's HDInsight service. We start with an overview of big data and Hadoop, but we don't emphasize only concepts in this book—we want you to jump in and get your hands dirty working with HDInsight in a practical way. To help you learn and even implement HDInsight right away, we focus

on a specific use case that applies to almost any organization and demonstrate a process that you can follow along with. We also help you learn more. In the last chapter, we look ahead at the future of HDInsight and give you recommendations for self-learning so that you can dive deeper into important concepts and round out your education on working with big data.

Microsoft Azure Machine Learning - Sumit Mund
2015-06-16

This book provides you with the skills necessary to get started with Azure Machine Learning to build predictive models as quickly as possible, in a very intuitive way, whether you are completely new to predictive analysis or an existing practitioner. The book starts by exploring ML Studio, the browser-based development environment, and explores the first step—data exploration and visualization. You will then build different predictive models using both supervised and unsupervised algorithms, including a simple

recommender system. The focus then shifts to learning how to deploy a model to production and publishing it as an API. The book ends with a couple of case studies using all the concepts and skills you have learned throughout the book to solve real-world problems.

Stream Analytics with Microsoft Azure - Anindita Basak
2017-12-01

Develop and manage effective real-time streaming solutions by leveraging the power of Microsoft Azure About This Book Analyze your data from various sources using Microsoft Azure Stream Analytics Develop, manage and automate your stream analytics solution with Microsoft Azure A practical guide to real-time event processing and performing analytics on the cloud Who This Book Is For If you are looking for a resource that teaches you how to process continuous streams of data in real-time, this book is what you need. A basic understanding of the concepts in analytics is all you need to

get started with this book What You Will Learn Perform real-time event processing with Azure Stream Analysis Incorporate the features of Big Data Lambda architecture pattern in real-time data processing Design a streaming pipeline for storage and batch analysis Implement data transformation and computation activities over stream of events Automate your streaming pipeline using Powershell and the .NET SDK Integrate your streaming pipeline with popular Machine Learning and Predictive Analytics modelling algorithms Monitor and troubleshoot your Azure Streaming jobs effectively In Detail Microsoft Azure is a very popular cloud computing service used by many organizations around the world. Its latest analytics offering, Stream Analytics, allows you to process and get actionable insights from different kinds of data in real-time. This book is your guide to understanding the basics of how Azure Stream Analytics works, and building your own

analytics solution using its capabilities. You will start with understanding what Stream Analytics is, and why it is a popular choice for getting real-time insights from data. Then, you will be introduced to Azure Stream Analytics, and see how you can use the tools and functions in Azure to develop your own Streaming Analytics. Over the course of the book, you will be given comparative analytic guidance on using Azure Streaming with other Microsoft Data Platform resources such as Big Data Lambda Architecture integration for real time data analysis and differences of scenarios for architecture designing with Azure HDInsight Hadoop clusters with Storm or Stream Analytics. The book also shows you how you can manage, monitor, and scale your solution for optimal performance. By the end of this book, you will be well-versed in using Azure Stream Analytics to develop an efficient analytics solution that can work with any type of data. Style and

approach A comprehensive guidance on developing real-time event processing with Azure Stream Analysis

Automated Machine Learning with Microsoft Azure
Dennis Michael Sawyers 2021-04-23

A practical, step-by-step guide to using Microsoft's AutoML technology on the Azure Machine Learning service for developers and data scientists working with the Python programming language Key Features Create, deploy, productionalize, and scale automated machine learning solutions on Microsoft Azure Improve the accuracy of your ML models through automatic data featurization and model training Increase productivity in your organization by using artificial intelligence to solve common problems

Book Description
Automated Machine Learning with Microsoft Azure will teach you how to build high-performing, accurate machine learning models in record time. It will equip you with the knowledge and skills to easily harness the power of artificial

intelligence and increase the productivity and profitability of your business. Guided user interfaces (GUIs) enable both novices and seasoned data scientists to easily train and deploy machine learning solutions to production. Using a careful, step-by-step approach, this book will teach you how to use Azure AutoML with a GUI as well as the AzureML Python software development kit (SDK). First, you'll learn how to prepare data, train models, and register them to your Azure Machine Learning workspace. You'll then discover how to take those models and use them to create both automated batch solutions using machine learning pipelines and real-time scoring solutions using Azure Kubernetes Service (AKS). Finally, you will be able to use AutoML on your own data to not only train regression, classification, and forecasting models but also use them to solve a wide variety of business problems. By the end of this Azure book, you'll be able to show your business

partners exactly how your ML models are making predictions through automatically generated charts and graphs, earning their trust and respect. What you will learn Understand how to train classification, regression, and forecasting ML algorithms with Azure AutoML Prepare data for Azure AutoML to ensure smooth model training and deployment Adjust AutoML configuration settings to make your models as accurate as possible Determine when to use a batch-scoring solution versus a real-time scoring solution Productionalize your AutoML and discover how to quickly deliver value Create real-time scoring solutions with AutoML and Azure Kubernetes Service Train a large number of

AutoML models at once using the AzureML Python SDK Who this book is for Data scientists, aspiring data scientists, machine learning engineers, or anyone interested in applying artificial intelligence or machine learning in their business will find this machine learning book useful. You need to have beginner-level knowledge of artificial intelligence and a technical background in computer science, statistics, or information technology before getting started. Familiarity with Python will help you implement the more advanced features found in the chapters, but even data analysts and SQL experts will be able to train ML models after finishing this book.