

Python Tutorial Aws

Eventually, you will unquestionably discover a new experience and exploit by spending more cash. nevertheless when? realize you say yes that you require to acquire those all needs considering having significantly cash? Why dont you try to get something basic in the beginning? Thats something that will lead you to comprehend even more more or less the globe, experience, some places, as soon as history, amusement, and a lot more?

It is your very own times to statute reviewing habit. accompanied by guides you could enjoy now is **Python Tutorial Aws** below.

Get Your Hands Dirty on Clean Architecture - Tom Hombergs 2019-09-30

Gain insight into how hexagonal architecture can help to keep the cost of development low over the complete lifetime of an application Key FeaturesExplore ways to make your software flexible, extensible, and adaptableLearn new concepts that you can easily blend with your own software development styleDevelop the mindset of building maintainable solutions instead of taking shortcutsBook Description We would all like to build software architecture that yields adaptable and flexible software with low development costs. But, unreasonable deadlines and shortcuts make it very hard to create such an architecture. **Get Your Hands Dirty on Clean Architecture** starts with a discussion about the conventional layered architecture style and its disadvantages. It also talks about the advantages of the domain-centric architecture styles of Robert

C. Martin's Clean Architecture and Alistair Cockburn's Hexagonal Architecture. Then, the book dives into hands-on chapters that show you how to manifest a hexagonal architecture in actual code. You'll learn in detail about different mapping strategies between the layers of a hexagonal architecture and see how to assemble the architecture elements into an application. The later chapters demonstrate how to enforce architecture boundaries. You'll also learn what shortcuts produce what types of technical debt and how, sometimes, it is a good idea to willingly take on those debts. After reading this book, you'll have all the knowledge you need to create applications using the hexagonal architecture style of web development. What you will learnIdentify potential shortcomings of using a layered architectureApply methods to enforce architecture boundariesFind out how potential shortcuts can affect the software

architectureProduce arguments for when to use which style of architectureStructure your code according to the architectureApply various types of tests that will cover each element of the architectureWho this book is for This book is for you if you care about the architecture of the software you are building. To get the most out of this book, you must have some experience with web development. The code examples in this book are in Java. If you are not a Java programmer but can read object-oriented code in other languages, you will be fine. In the few places where Java or framework specifics are needed, they are thoroughly explained.

AWS System Administration - Mike Ryan

2018-08-08

With platforms designed for rapid adaptation and failure recovery such as Amazon Web Services, cloud computing is more like programming than traditional system administration. Tools for automatic scaling and instance replacement allow even small DevOps teams to manage massively scalable application infrastructures—if team members drop their old views of development and operations and start mastering automation. This comprehensive guide shows developers and system administrators how to configure and manage AWS services including EC2, CloudFormation, Elastic Load Balancing, S3, and Route 53. Sysadms will learn will learn to automate their favorite tools and processes;

developers will pick up enough ops knowledge to build a robust and resilient AWS application infrastructure. Launch instances with EC2 or CloudFormation Securely deploy and manage your applications with AWS tools Learn to automate AWS configuration management with Python and Puppet Deploy applications with Auto Scaling and Elastic Load Balancing Explore approaches for deploying application and infrastructure updates Save time on development and operations with reusable components Learn strategies for managing log files in AWS environments Configure a cloud-aware DNS service with Route 53 Use AWS CloudWatch to monitor your infrastructure and applications

AWS Certified Advanced Networking Official Study Guide - Sidhartha Chauhan 2018-02-13

The official study guide for the AWS certification specialty exam The AWS Certified Advanced Networking Official Study Guide – Specialty Exam helps to ensure your preparation for the AWS Certified Advanced Networking – Specialty Exam. Expert review of AWS fundamentals align with the exam objectives, and detailed explanations of key exam topics merge with real-world scenarios to help you build the robust knowledge base you need to succeed on the exam—and in the field as an AWS Certified Networking specialist. Coverage includes the design, implementation, and deployment of cloud-based solutions; core AWS services implementation and knowledge of

architectural best practices; AWS service architecture design and maintenance; networking automation; and more. You also get one year of free access to Sybex's online interactive learning environment and study tools, which features flashcards, a glossary, chapter tests, practice exams, and a test bank to help you track your progress and gauge your readiness as exam day grows near. The AWS credential validates your skills surrounding AWS and hybrid IT network architectures at scale. The exam assumes existing competency with advanced networking tasks, and assesses your ability to apply deep technical knowledge to the design and implementation of AWS services. This book provides comprehensive review and extensive opportunities for practice, so you can polish your skills and approach exam day with confidence. Study key exam essentials with expert insight Understand how AWS skills translate to real-world solutions Test your knowledge with challenging review questions Access online study tools, chapter tests, practice exams, and more Technical expertise in cloud computing, using AWS, is in high demand, and the AWS certification shows employers that you have the knowledge and skills needed to deliver practical, forward-looking cloud-based solutions. The AWS Certified Advanced Networking Official Study Guide – Specialty Exam helps you learn what you need to take this next big step for your career.

Artificial Intelligence with Python - Prateek Joshi

2017-01-27

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

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

A Hands-On Introduction to Machine Learning - Chirag Shah 2022-12-31

Packed with real-world examples, industry insights and practical activities, this textbook is designed to teach machine learning in a way that is easy to understand and apply. It assumes only a basic knowledge of technology, making it an ideal resource for students and professionals, including those who are new to computer science. All the necessary topics are covered, including supervised and unsupervised learning, neural networks, reinforcement learning, cloud-based services, and the ethical issues still posing problems within the industry. While Python is used as the primary language, many exercises will also have the solutions provided in R for greater versatility. A suite of online resources is available to support teaching across a range of different courses, including example syllabi, a solutions manual, and lecture slides. Datasets and code are also available online for students, giving them everything they need to practice the examples and problems in the book.

Python and AWS Cookbook - Mitch Garnaat 2011-10-24

If you intend to use Amazon Web Services (AWS) for remote computing and storage, Python is an ideal programming language for developing applications and controlling your cloud-based infrastructure. This cookbook gets you started with more than two dozen recipes for using

Python with AWS, based on the author's boto library. You'll find detailed recipes for working with the S3 storage service as well as EC2, the service that lets you design and build cloud applications. Each recipe includes a code solution you can use immediately, along with a discussion of why and how the recipe works. You also get detailed advice for using boto with AWS and other cloud services. This book's recipes include methods to help you: Launch instances on EC2, and keep track of them with tags Associate an Elastic IP address with an instance Restore a failed Elastic Block Store volume from a snapshot Store and monitor your own custom metrics in CloudWatch Create a bucket in S3 to contain your data objects Reduce the cost of storing noncritical data Prevent accidental deletion of data in S3

[AWS Security Cookbook](#) - Heartin Kanikathottu

2020-02-27

Secure your Amazon Web Services (AWS) infrastructure with permission policies, key management, and network security, along with following cloud security best practices Key FeaturesExplore useful recipes for implementing robust cloud security solutions on AWSMonitor your AWS infrastructure and workloads using CloudWatch, CloudTrail, config, GuardDuty, and MaciePrepare for the AWS Certified Security-Specialty exam by exploring various security models and compliance offeringsBook Description

As a security consultant, securing your infrastructure by implementing policies and following best practices is critical. This cookbook discusses practical solutions to the most common problems related to safeguarding infrastructure, covering services and features within AWS that can help you implement security models such as the CIA triad (confidentiality, integrity, and availability), and the AAA triad (authentication, authorization, and availability), along with non-repudiation. The book begins with IAM and S3 policies and later gets you up to speed with data security, application security, monitoring, and compliance. This includes everything from using firewalls and load balancers to secure endpoints, to leveraging Cognito for managing users and authentication. Over the course of this book, you'll learn to use AWS security services such as Config for monitoring, as well as maintain compliance with GuardDuty, Macie, and Inspector. Finally, the book covers cloud security best practices and demonstrates how you can integrate additional security services such as Glacier Vault Lock and Security Hub to further strengthen your infrastructure. By the end of this book, you'll be well versed in the techniques required for securing AWS deployments, along with having the knowledge to prepare for the AWS Certified Security – Specialty certification. What you will learnCreate and manage users, groups, roles, and policies across accountsUse

AWS Managed Services for logging, monitoring, and auditing
Check compliance with AWS Managed Services that use machine learning
Provide security and availability for EC2 instances and applications
Secure data using symmetric and asymmetric encryption
Manage user pools and identity pools with federated login
Who this book is for
If you are an IT security professional, cloud security architect, or a cloud application developer working on security-related roles and are interested in using AWS infrastructure for secure application deployments, then this Amazon Web Services book is for you. You will also find this book useful if you're looking to achieve AWS certification. Prior knowledge of AWS and cloud computing is required to get the most out of this book.

Proceedings of the Future Technologies Conference (FTC) 2021, Volume 1 - Kohei Arai
2021-10-23

This book covers a wide range of important topics including but not limited to Technology Trends, Computing, Artificial Intelligence, Machine Vision, Communication, Security, e-Learning, and Ambient Intelligence and their applications to the real world. The sixth Future Technologies Conference 2021 was organized virtually and received a total of 531 submissions from academic pioneering researchers, scientists, industrial engineers, and students from all over the world.. After a double-blind peer review

process, 191 submissions have been selected to be included in these proceedings. One of the meaningful and valuable dimensions of this conference is the way it brings together a large group of technology geniuses in one venue to not only present breakthrough research in future technologies, but also to promote discussions and debate of relevant issues, challenges, opportunities and research findings. We hope that readers find the book interesting, exciting, and inspiring; it provides the state-of-the-art intelligent methods and techniques for solving real-world problems along with a vision of the future research.

[Practical MLOps](#) - Noah Gift 2021-09-14

Getting your models into production is the fundamental challenge of machine learning. MLOps offers a set of proven principles aimed at solving this problem in a reliable and automated way. This insightful guide takes you through what MLOps is (and how it differs from DevOps) and shows you how to put it into practice to operationalize your machine learning models. Current and aspiring machine learning engineers- or anyone familiar with data science and Python- will build a foundation in MLOps tools and methods (along with AutoML and monitoring and logging), then learn how to implement them in AWS, Microsoft Azure, and Google Cloud. The faster you deliver a machine learning system that works, the faster you can focus on the business

problems you're trying to crack. This book gives you a head start. You'll discover how to: Apply DevOps best practices to machine learning Build production machine learning systems and maintain them Monitor, instrument, load-test, and operationalize machine learning systems Choose the correct MLOps tools for a given machine learning task Run machine learning models on a variety of platforms and devices, including mobile phones and specialized hardware

Python Tutorial - Guido Rossum 2018-06-19

Python is an easy to learn, powerful programming language. It has efficient high-level data structures and a simple but effective approach to object-oriented programming. Python's elegant syntax and dynamic typing, together with its interpreted nature, make it an ideal language for scripting and rapid application development in many areas on most platforms. The Python interpreter and the extensive standard library are freely available in source or binary form for all major platforms from the Python Web site, <https://www.python.org/>, and may be freely distributed. The same site also contains distributions of and pointers to many free third party Python modules, programs and tools, and additional documentation. The Python interpreter is easily extended with new functions and data types implemented in C or C++ (or other languages callable from C). Python is also suitable as an extension language for customizable applications.

This tutorial introduces the reader informally to the basic concepts and features of the python language and system. It helps to have a Python interpreter handy for hands-on experience, but all examples are self contained, so the tutorial can be read off-line as well. For a description of standard objects and modules, see [library-index](#). [reference-index](#) gives a more formal definition of the language. To write extensions in C or C++, read [extending-index](#) and [c-api-index](#). There are also several books covering Python in depth. This tutorial does not attempt to be comprehensive and cover every single feature, or even every commonly used feature. Instead, it introduces many of Python's most noteworthy features, and will give you a good idea of the language's flavor and style. After reading it, you will be able to read and write Python modules and programs, and you will be ready to learn more about the various Python library modules described in [library-index](#). The Glossary is also worth going through.

AWS For Admins For Dummies - John Paul Mueller 2016-10-19

Easily get your head in the Cloud with Amazon Web Services With Amazon Web Services (AWS), you can do everything from backing up your personal hard drive to creating a full-fledged IT department in the Cloud. And while major corporations like Adobe and Netflix have turned to AWS for their Cloud computing needs, it isn't just for private companies. Amazon Web Services For

Dummies is the singular resource that shows real people with real businesses how to use on-demand IT resources to help their companies grow. If you're like most people just getting their feet wet with this service, your first question is likely to be, "How do I get started with AWS?" This book answers that question—and a multitude more—in language you can understand and shows you how to put this Cloud computing service to work for you right away. AWS is immense and, naturally, intimidating, but with the help of this book, you'll peel back its many layers in no time! Provides overviews that explain what tasks the services perform and how they relate to each other Offers specific paths to follow in order to obtain a particular installation result Gets you started without making a huge investment Reduces the risk of failure by ensuring you understand available options as part of the configuration and usage process Stop wasting time and resources on hardware and software that's quickly outdated. Get started with AWS today!

[The Definitive Guide to AWS Infrastructure Automation](#) - Bradley Campbell 2019-12-06

Discover the pillars of AWS infrastructure automation, starting with API-driven infrastructure concepts and its immediate benefits such as increased agility, automation of the infrastructure life cycle, and flexibility in experimenting with new architectures. With this base established, the

book discusses infrastructure-as-code concepts in a general form, establishing principled outcomes such as security and reproducibility. Inescapably, we delve into how these concepts enable and underpin the DevOps movement. The Definitive Guide to AWS Infrastructure Automation begins by discussing services and tools that enable infrastructure-as-code solutions; first stop: AWS's CloudFormation service. You'll then cover the ever-expanding ecosystem of tooling emerging in this space, including CloudFormation wrappers such as Troposphere and orchestrators such as Sceptre, to completely independent third-party tools such as Terraform and Pulumi. As a bonus, you'll also work with AWS' newly-released CDK (Cloud Development Kit). You'll then look at how to implement modular, robust, and extensible solutions across a few examples -- in the process building out each solution with several different tools to compare and contrast the strengths and weaknesses of each. By the end of the journey, you will have gained a wide knowledge of both the AWS-provided and third-party ecosystem of infrastructure-as-code/provisioning tools, and the strengths and weaknesses of each. You'll possess a mental framework for how to craft an infrastructure-as-code solution to solve future problems based on examples discussed throughout the book. You'll also have a demonstrable understanding of the hands-on operation of each tool, situational appropriateness

of each tool, and how to leverage the tool day to day. What You Will Learn Discover the technological and organizational benefits to infrastructure-as-code solutions Examine the overall landscape of infrastructure-as-code tooling and solutions available to consumers of AWS services See the strengths and weaknesses of these tools relative to one another as examined through hands-on implementation of several solutions Gain hands-on experience, best practices, and tips and tricks learned through several years' real-world experience delivering solutions using these very tools in a wide variety of scenarios Engineer solid solutions that leave room for new requirements and changes without requiring needless refactoring Who This Book Is For DevOps engineers, cloud engineers and architects focused on the AWS ecosystem, software engineers/developers working within the AWS ecosystem, and engineering leaders looking for best practices.

Pragmatic AI - Noah Gift 2018-07-12

Master Powerful Off-the-Shelf Business Solutions for AI and Machine Learning Pragmatic AI will help you solve real-world problems with contemporary machine learning, artificial intelligence, and cloud computing tools. Noah Gift demystifies all the concepts and tools you need to get results—even if you don't have a strong background in math or data science. Gift illuminates powerful off-the-shelf cloud offerings

from Amazon, Google, and Microsoft, and demonstrates proven techniques using the Python data science ecosystem. His workflows and examples help you streamline and simplify every step, from deployment to production, and build exceptionally scalable solutions. As you learn how machine language (ML) solutions work, you'll gain a more intuitive understanding of what you can achieve with them and how to maximize their value. Building on these fundamentals, you'll walk step-by-step through building cloud-based AI/ML applications to address realistic issues in sports marketing, project management, product pricing, real estate, and beyond. Whether you're a business professional, decision-maker, student, or programmer, Gift's expert guidance and wide-ranging case studies will prepare you to solve data science problems in virtually any environment. Get and configure all the tools you'll need Quickly review all the Python you need to start building machine learning applications Master the AI and ML toolchain and project lifecycle Work with Python data science tools such as IPython, Pandas, Numpy, Jupyter Notebook, and Sklearn Incorporate a pragmatic feedback loop that continually improves the efficiency of your workflows and systems Develop cloud AI solutions with Google Cloud Platform, including TPU, Colaboratory, and Datalab services Define Amazon Web Services cloud AI workflows, including spot instances, code

pipelines, boto, and more Work with Microsoft Azure AI APIs Walk through building six real-world AI applications, from start to finish Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Learning AWS Lambda - Markus Klems 2017

"Amazon Lambda is the part of Amazon Web Services that lets you run your code without provisioning or managing servers. Amazon Lambda is a compute service that enables you to deploy applications and back-end services that operate with zero upfront cost and require no system administration. This video tutorial will start with the basics of Amazon Lambda and will then walk you through combining Lambda with other Amazon Web Services, such as Amazon API Gateway Service, Amazon DynamoDB, and so on. Moving on, this tutorial will show you how to write, run, and test Lambda functions using Node.js, Java, Python, and C#. Moreover, you will learn how to use its serverless framework to increase your development productivity."--

Resource description page.

Mastering AWS Lambda - Yohan Wadia

2017-08-11

Build cost-effective and highly scalable Serverless applications using AWS Lambda. About This Book Leverage AWS Lambda to significantly lower your infrastructure costs and deploy out massively scalable, event-driven systems and

applications Learn how to design and build Lambda functions using real-world examples and implementation scenarios Explore the Serverless ecosystem with a variety of toolsets and AWS services including DynamoDB, API Gateway, and much more! Who This Book Is For If you are a Cloud administrator and/or developer who wishes to explore, learn, and leverage AWS Lambda to design, build, and deploy Serverless applications in the cloud, then this is the book for you! The book assumes you have some prior knowledge and hands-on experience with AWS core services such as EC2, IAM, S3, along with the knowledge to work with any popular programming language such as Node.js, Java, C#, and so on. What You Will Learn Understand the hype, significance, and business benefits of Serverless computing and applications Plunge into the Serverless world of AWS Lambda and master its core components and how it works Find out how to effectively and efficiently design, develop, and test Lambda functions using Node.js, along with some keen coding insights and best practices Explore best practices to effectively monitor and troubleshoot Serverless applications using AWS CloudWatch and other third-party services in the form of Datadog and Loggly Quickly design and develop Serverless applications by leveraging AWS Lambda, DynamoDB, and API Gateway using the Serverless Application Framework (SAF) and other AWS services such as Step Functions

Explore a rich variety of real-world Serverless use cases with Lambda and see how you can apply it to your environments In Detail AWS is recognized as one of the biggest market leaders for cloud computing and why not? It has evolved a lot since the time it started out by providing just basic services such as EC2 and S3 and today; they go all the way from IoT to Machine Learning, Image recognition, Chatbot Frameworks, and much more! One of those recent services that is also gaining a lot of traction is AWS Lambda! Although seemingly simple and easy to use, Lambda is a highly effective and scalable compute service that provides developers with a powerful platform to design and develop Serverless event-driven systems and applications. The book begins with a high-level introduction into the world of Serverless computing and its advantages and use cases, followed by a deep dive into AWS Lambda! You'll learn what services AWS Lambda provides to developers; how to design, write, and test Lambda functions; as well as monitor and troubleshoot them. The book is designed and accompanied with a vast variety of real-world examples, use cases, and code samples that will enable you to get started on your Serverless applications quickly. By the end of the book, you will have gained all the skills required to work with AWS Lambda services! Style and approach This step-by-step guide will help you build Serverless applications and run

Serverless workloads using the AWS Lambda service. You'll be able to get started with it in a matter of minutes with easy-to-follow code snippets and examples.

[Generative Adversarial Networks with Python](#) -

Jason Brownlee 2019-07-11

Step-by-step tutorials on generative adversarial networks in python for image synthesis and image translation.

Python and AWS Cookbook - Mitch Garnaat 2011-10-31

This book focuses on Elastic Compute Cloud (EC2) and Simple Storage Service (S3) for developers writing in Python.

AWS for Developers For Dummies - John Paul Mueller 2017-07-28

Everything you need to get running with IaaS for Amazon Web Services Modern businesses rely on Infrastructure-as-a-Service (IaaS)—a setup in which someone else foots the bill to create application environments—and developers are expected to know how to write both platform-specific and IaaS-supported applications. If you're a developer who writes desktop and web applications but have little-to-no experience with cloud development, this book is an essential tool in getting started in the IaaS environment with Amazon Web Services. In *Amazon Web Services For Developers For Dummies*, you'll quickly and easily get up to speed on which language or platform will work best to meet a specific need,

how to work with management consoles, ways you'll interact with services at the command line, how to create applications with the AWS API, and so much more. Assess development options to produce the kind of result that's actually needed Use the simplest approach to accomplish any given task Automate tasks using something as simple as the batch processing features offered by most platforms Create example applications using JavaScript, Python, and R Discover how to use the XML files that appear in the management console to fine tune your configuration Making sense of Amazon Web Services doesn't have to be as difficult as it seems—and this book shows you how.

Building Serverless Microservices in Python -

Richard Takashi Freeman 2019-03-29

A practical guide for developing end-to-end serverless microservices in Python for developers, DevOps, and architects. Key Features Create a secure, cost-effective, and scalable serverless data API Use identity management and authentication for a user-specific and secure web application Go beyond traditional web hosting to explore the full range of cloud hosting options Book Description Over the last few years, there has been a massive shift from monolithic architecture to microservices, thanks to their small and independent deployments that allow increased flexibility and agile delivery. Traditionally, virtual machines and

containers were the principal mediums for deploying microservices, but they involved a lot of operational effort, configuration, and maintenance. More recently, serverless computing has gained popularity due to its built-in autoscaling abilities, reduced operational costs, and increased productivity. Building Serverless Microservices in Python begins by introducing you to serverless microservice structures. You will then learn how to create your first serverless data API and test your microservice. Moving on, you'll delve into data management and work with serverless patterns. Finally, the book introduces you to the importance of securing microservices. By the end of the book, you will have gained the skills you need to combine microservices with serverless computing, making their deployment much easier thanks to the cloud provider managing the servers and capacity planning. What you will learn Discover what microservices offer above and beyond other architectures Create a serverless application with AWS Gain secure access to data and resources Run tests on your configuration and code Create a highly available serverless microservice data API Build, deploy, and run your serverless configuration and code Who this book is for If you are a developer with basic knowledge of Python and want to learn how to build, test, deploy, and secure microservices, then this book is for you. No prior knowledge of building microservices is required.

Building Serverless Python Web Services with Zappa - Abdulwahid Abdulhaque Barguzar

2018-07-30

Master serverless architectures in Python and their implementation, with Zappa on three different frameworks. Key Features Scalable serverless Python web services using Django, Flask, and Pyramid. Learn Asynchronous task execution on AWS Lambda and scheduling using Zappa. Implementing Zappa in a Docker container. Book Description Serverless applications are becoming very popular these days, not just because they save developers the trouble of managing the servers, but also because they provide several other benefits such as cutting heavy costs and improving the overall performance of the application. This book will help you build serverless applications in a quick and efficient way. We begin with an introduction to AWS and the API gateway, the environment for serverless development, and Zappa. We then look at building, testing, and deploying apps in AWS with three different frameworks--Flask, Django, and Pyramid. Setting up a custom domain along with SSL certificates and configuring them with Zappa is also covered. A few advanced Zappa settings are also covered along with securing Zappa with AWS VPC. By the end of the book you will have mastered using three frameworks to build robust and cost-efficient serverless apps in Python. What you will learn

Build, test, and deploy a simple web service using AWS CLI Integrate Flask-based Python applications, via AWS CLI configuration Design Rest APIs integrated with Zappa for Flask and Django Create a project in the Pyramid framework and configure it with Zappa Generate SSL Certificates using Amazon Certificate Manager Configure custom domains with AWS Route 53 Create a Docker container similar to AWS Lambda Who this book is for Python Developers who are interested in learning how to develop fast and highly scalable serverless applications in Python, will find this book useful **AWS Certified Developer - Associate (DVA-C01) Cert Guide** - Marko Sluga 2020-04-30 Learn, prepare, and practice for AWS Certified Developer - Associate (DVA-C01) exam success with this Cert Guide from Pearson IT Certification, a leader in IT Certification learning. Explore the AWS Certified Developer - Associate (DVA-C01) exam topics as defined in the latest official exam objectives from Amazon Pre-test your knowledge before each chapter with core concept quizzes Assess your knowledge and retention with chapter-ending quizzes Review key concepts with exam preparation tasks Practice with realistic exam questions covering the entire body of exam objectives Learn from more than one hour of video mentoring AWS Certified Developer - Associate (DVA-C01) Cert Guide is a best-of-breed exam study guide. Best-selling author and

expert instructor Marko Sluga shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The book presents you with an organized test preparation routine through the use of proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. End-of-chapter quizzes help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan. The companion website contains the powerful Pearson Test Prep practice test software, complete with hundreds of exam-realistic questions. The assessment engine offers you a wealth of customization options and reporting features, laying out a complete assessment of your knowledge to help you focus your study where it is needed most. The companion website also contains more than one hour of personal video mentoring from the author. Well regarded for its level of detail, assessment features, and challenging quizzes, this study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. The study guide helps you master all the topics

on the AWS Certified Developer – Associate (DVA-C01) exam, including: Deployment: CLI, SDKs, CI/CD pipelines, CloudFormation, Elastic Beanstalk, deployment/provisioning processes and patterns, serverless design, and more Security: Authentication via AWS CLI and SDKs; IAM users, groups, roles, and policies; IAM federation with external directories and identity providers; security groups and NACLs Development with AWS services: Implementing designs in code; interacting with infrastructure via AWS CLI, SDKs, and APIs; DevOps approaches and Code tools Refactoring: AWS data transfer, transport, and transform tools; managed AWS services for refactoring new or migrated applications Monitoring and troubleshooting: CloudWatch data capture and analysis; application problem solving, scaling, and optimization; CloudTrail tracing and auditing; and more Companion Website: The website contains two free, complete practice exams and more than one hour of video training. Includes Exclusive Offer for up to 80% Off Premium Edition eBook and Practice Test and Video Training. Pearson Test Prep online system requirements: Browsers: Chrome version 73 and above; Safari version 12 and above; Microsoft Edge 44 and above. Devices: Desktop and laptop computers, tablets running on Android v8.0 and iOS v13, smartphones with a minimum screen size of 4.7". Internet access required. Pearson Test Prep

offline system requirements: Windows 10, Windows 8.1; Microsoft .NET Framework 4.5 Client; Pentium-class 1 GHz processor (or equivalent); 512 MB RAM; 650 MB disk space plus 50 MB for each downloaded practice exam; access to the Internet to register and download exam databases

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.

Programming AWS Lambda - John Chapin

2020-03-18

Serverless revolutionizes the way organizations build and deploy software. With this hands-on guide, Java engineers will learn how to use their experience in the new world of serverless computing. You'll discover how this cloud computing execution model can drastically decrease the complexity in developing and operating applications while reducing costs and time to market. Engineering leaders John Chapin and Mike Roberts guide you through the process of developing these applications using AWS Lambda, Amazon's event-driven, serverless computing platform. You'll learn how to prepare the development environment, program Lambda functions, and deploy and operate your serverless software. The chapters include exercises to help you through each aspect of the process. Get an introduction to serverless, functions as a service, and AWS Lambda Learn how to deploy working Lambda functions to the cloud Program Lambda functions and learn how the Lambda platform integrates with other AWS services Build and package Java-based Lambda code and dependencies Create serverless applications by building a serverless API and data pipeline Test your serverless applications using automated techniques Apply advanced techniques to build production-ready applications Understand both the gotchas and new opportunities of serverless

architecture

Python for DevOps - Noah Gift 2019-12-12

Much has changed in technology over the past decade. Data is hot, the cloud is ubiquitous, and many organizations need some form of automation. Throughout these transformations, Python has become one of the most popular languages in the world. This practical resource shows you how to use Python for everyday Linux systems administration tasks with today's most useful DevOps tools, including Docker, Kubernetes, and Terraform. Learning how to interact and automate with Linux is essential for millions of professionals. Python makes it much easier. With this book, you'll learn how to develop software and solve problems using containers, as well as how to monitor, instrument, load-test, and operationalize your software. Looking for effective ways to "get stuff done" in Python? This is your guide. Python foundations, including a brief introduction to the language How to automate text, write command-line tools, and automate the filesystem Linux utilities, package management, build systems, monitoring and instrumentation, and automated testing Cloud computing, infrastructure as code, Kubernetes, and serverless Machine learning operations and data engineering from a DevOps perspective Building, deploying, and operationalizing a machine learning project

Machine Learning with Python Cookbook - Chris

Albon 2018-03-09

This practical guide provides nearly 200 self-contained recipes to help you solve machine learning challenges you may encounter in your daily work. If you're comfortable with Python and its libraries, including pandas and scikit-learn, you'll be able to address specific problems such as loading data, handling text or numerical data, model selection, and dimensionality reduction and many other topics. Each recipe includes code that you can copy and paste into a toy dataset to ensure that it actually works. From there, you can insert, combine, or adapt the code to help construct your application. Recipes also include a discussion that explains the solution and provides meaningful context. This cookbook takes you beyond theory and concepts by providing the nuts and bolts you need to construct working machine learning applications. You'll find recipes for:

Vectors, matrices, and arrays Handling numerical and categorical data, text, images, and dates and times Dimensionality reduction using feature extraction or feature selection Model evaluation and selection Linear and logical regression, trees and forests, and k-nearest neighbors Support vector machines (SVM), naïve Bayes, clustering, and neural networks Saving and loading trained models

Learn Python 3 the Hard Way - Zed A. Shaw

2017-06-26

You Will Learn Python 3! Zed Shaw has

perfected the world's best system for learning Python 3. Follow it and you will succeed—just like the millions of beginners Zed has taught to date! You bring the discipline, commitment, and persistence; the author supplies everything else. In *Learn Python 3 the Hard Way*, you'll learn Python by working through 52 brilliantly crafted exercises. Read them. Type their code precisely. (No copying and pasting!) Fix your mistakes. Watch the programs run. As you do, you'll learn how a computer works; what good programs look like; and how to read, write, and think about code. Zed then teaches you even more in 5+ hours of video where he shows you how to break, fix, and debug your code—live, as he's doing the exercises. Install a complete Python environment Organize and write code Fix and break code Basic mathematics Variables Strings and text Interact with users Work with files Looping and logic Data structures using lists and dictionaries Program design Object-oriented programming Inheritance and composition Modules, classes, and objects Python packaging Automated testing Basic game development Basic web development It'll be hard at first. But soon, you'll just get it—and that will feel great! This course will reward you for every minute you put into it. Soon, you'll know one of the world's most powerful, popular programming languages. You'll be a Python programmer. This Book Is Perfect For Total beginners with zero programming experience

Junior developers who know one or two languages Returning professionals who haven't written code in years Seasoned professionals looking for a fast, simple, crash course in Python 3

Python Projects - Laura Cassell 2014-11-24

A guide to completing Python projects for those ready to take their skills to the next level Python Projects is the ultimate resource for the Python programmer with basic skills who is ready to move beyond tutorials and start building projects. The preeminent guide to bridge the gap between learning and doing, this book walks readers through the "where" and "how" of real-world Python programming with practical, actionable instruction. With a focus on real-world functionality, Python Projects details the ways that Python can be used to complete daily tasks and bring efficiency to businesses and individuals alike. Python Projects is written specifically for those who know the Python syntax and lay of the land, but may still be intimidated by larger, more complex projects. The book provides a walk-through of the basic set-up for an application and the building and packaging for a library, and explains in detail the functionalities related to the projects. Topics include: *How to maximize the power of the standard library modules *Where to get third party libraries, and the best practices for utilization *Creating, packaging, and reusing libraries within and across projects *Building

multi-layered functionality including networks, data, and user interfaces *Setting up development environments and using virtualenv, pip, and more Written by veteran Python trainers, the book is structured for easy navigation and logical progression that makes it ideal for individual, classroom, or corporate training. For Python developers looking to apply their skills to real-world challenges, Python Projects is a goldmine of information and expert insight.

XGBoost With Python - Jason Brownlee
2016-08-05

XGBoost is the dominant technique for predictive modeling on regular data. The gradient boosting algorithm is the top technique on a wide range of predictive modeling problems, and XGBoost is the fastest implementation. When asked, the best machine learning competitors in the world recommend using XGBoost. In this Ebook, learn exactly how to get started and bring XGBoost to your own machine learning projects.

AWS Lambda in Action - Danilo Poccia
2016-11-27

Summary AWS Lambda in Action is an example-driven tutorial that teaches you how to build applications that use an event-driven approach on the back end. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology With AWS Lambda, you write your code and upload it to the AWS cloud. AWS Lambda

responds to the events triggered by your application or your users, and automatically manages the underlying computer resources for you. Back-end tasks like analyzing a new document or processing requests from a mobile app are easy to implement. Your application is divided into small functions, leading naturally to a reactive architecture and the adoption of microservices. About the Book AWS Lambda in Action is an example-driven tutorial that teaches you how to build applications that use an event-driven approach on the back-end. Starting with an overview of AWS Lambda, the book moves on to show you common examples and patterns that you can use to call Lambda functions from a web page or a mobile app. The second part of the book puts these smaller examples together to build larger applications. By the end, you'll be ready to create applications that take advantage of the high availability, security, performance, and scalability of AWS. What's Inside Create a simple API Create an event-driven media-sharing application Secure access to your application in the cloud Use functions from different clients like web pages or mobile apps Connect your application with external services About the Reader Requires basic knowledge of JavaScript. Some examples are also provided in Python. No AWS experience is assumed. About the Author Danilo Poccia is a technical evangelist at Amazon Web Services and a frequent speaker at public

events and workshops. Table of Contents PART 1 - FIRST STEPS Running functions in the cloud Your first Lambda function Your function as a web API PART 2 - BUILDING EVENT-DRIVEN APPLICATIONS Managing security Using standalone functions Managing identities Calling functions from a client Designing an authentication service Implementing an authentication service Adding more features to the authentication service Building a media-sharing application Why event-driven? PART 3 - FROM DEVELOPMENT TO PRODUCTION Improving development and testing Automating deployment Automating infrastructure management PART 4 - USING EXTERNAL SERVICES Calling external services Receiving events from other services **AWS Lambda - Mike Chapin 2017** 3.5 Hours of Video Instruction on AWS Lambda and Serverless Applications Overview More than 3.5 hours of practical video instruction on AWS Lambda--Amazon's Functions-as-a-Service technology--and how to build Serverless applications. The aim throughout this course is not to give you just cookie cutter examples but instead to give you a thorough understanding of the Lambda platform and programming model, so you'll have confidence building your own Serverless applications. Description Serverless is a new cloud computing approach to architecting and building applications. It enables faster

delivery of business value and reduced operational cost and complexity, together with virtually limitless and effortless scaling. The core technology class of a Serverless architecture is Functions-as-a-Service, and the most mature Functions-as-a-Service product is Lambda, from Amazon Web Services. AWS Lambda LiveLessons is designed to give you a thorough understanding of the Lambda platform and programming model, so you'll have confidence building your own Serverless applications.

Although AWS Lambda natively supports several languages, including Javascript, Python and C#, this video tutorial uses Java and its Java Virtual Machine as the development language and runtime for all examples. The video starts off by introducing Serverless and answering the question, "What is Lambda?" It explains Serverless fundamentals and compares the different Serverless technology classes of Backend-as-a-Service and Functions-as-a-Service, as well as the benefits and limitations of Serverless. Next, Roberts and Chapin review the necessary environment prerequisites before showing you how to code and execute your first Lambda function. They then drill down into some details of the Lambda model and show you how to build a Lambda-backed web application using API Gateway. Finally, the course covers some additional theory to give you a more advanced understanding of AWS Lambda. Roberts and

Chapin close by looking more holistically at Serverless architectures and providing a detailed overview of Serverless technology beyond AWS Lambda, including a range of examples of how Serverless architectures are built in the real world. AWS Lambda LiveLessons consists of seven lessons totaling more than 4 hours of instruction. The videos feature easy-to-understand explanations of key concepts, realistic examples, and demonstrations of industrial-grade deployments. View the link resources...

Long Short-Term Memory Networks With Python - Jason Brownlee 2017-07-20

The Long Short-Term Memory network, or LSTM for short, is a type of recurrent neural network that achieves state-of-the-art results on challenging prediction problems. In this laser-focused Ebook, finally cut through the math, research papers and patchwork descriptions about LSTMs. Using clear explanations, standard Python libraries and step-by-step tutorial lessons you will discover what LSTMs are, and how to develop a suite of LSTM models to get the most out of the method on your sequence prediction problems.

Artificial Intelligence Programming with Python - Perry Xiao 2022-02-21

A hands-on roadmap to using Python for artificial intelligence programming In Practical Artificial Intelligence Programming with Python: From Zero to Hero, veteran educator and photophysicist Dr.

Perry Xiao delivers a thorough introduction to one of the most exciting areas of computer science in modern history. The book demystifies artificial intelligence and teaches readers its fundamentals from scratch in simple and plain language and with illustrative code examples. Divided into three parts, the author explains artificial intelligence generally, machine learning, and deep learning. It tackles a wide variety of useful topics, from classification and regression in machine learning to generative adversarial networks. He also includes: Fulsome introductions to MATLAB, Python, AI, machine learning, and deep learning Expansive discussions on supervised and unsupervised machine learning, as well as semi-supervised learning Practical AI and Python “cheat sheet” quick references This hands-on AI programming guide is perfect for anyone with a basic knowledge of programming—including familiarity with variables, arrays, loops, if-else statements, and file input and output—who seeks to understand foundational concepts in AI and AI development.

Aws: Amazon Web Services Tutorial for Beginners
- Bert David 2018-09-15

Quickstart guide for AWS: Amazon Web Services AWS is an incredibly versatile and powerful cloud service, but only if you know how to use it! Need to learn AWS fast? Amazon Web Services is a cloud service that can be used to for building, testing, and managing applications and services

through a network of servers managed by Amazon in various locations all over the world. When you understand how to use Amazon Web Services, you unlock a world of computing power and possibilities. Get the most out of AWS simply by following the easy instructions fully explained inside this guide. It doesn

Machine Learning Engineering with Python - Andrew P. McMahon 2021-11-05

Supercharge the value of your machine learning models by building scalable and robust solutions that can serve them in production environments Key FeaturesExplore hyperparameter optimization and model management toolsLearn object-oriented programming and functional programming in Python to build your own ML libraries and packagesExplore key ML engineering patterns like microservices and the Extract Transform Machine Learn (ETML) pattern with use casesBook Description Machine learning engineering is a thriving discipline at the interface of software development and machine learning. This book will help developers working with machine learning and Python to put their knowledge to work and create high-quality machine learning products and services. Machine Learning Engineering with Python takes a hands-on approach to help you get to grips with essential technical concepts, implementation patterns, and development methodologies to have you up and running in no time. You'll begin by

understanding key steps of the machine learning development life cycle before moving on to practical illustrations and getting to grips with building and deploying robust machine learning solutions. As you advance, you'll explore how to create your own toolsets for training and deployment across all your projects in a consistent way. The book will also help you get hands-on with deployment architectures and discover methods for scaling up your solutions while building a solid understanding of how to use cloud-based tools effectively. Finally, you'll work through examples to help you solve typical business problems. By the end of this book, you'll be able to build end-to-end machine learning services using a variety of techniques and design your own processes for consistently performant machine learning engineering. What you will learn

Find out what an effective ML engineering process looks like
Uncover options for automating training and deployment and learn how to use them
Discover how to build your own wrapper libraries for encapsulating your data science and machine learning logic and solutions
Understand what aspects of software engineering you can bring to machine learning
Gain insights into adapting software engineering for machine learning using appropriate cloud technologies
Perform hyperparameter tuning in a relatively automated way

Who this book is for
This book is for machine learning engineers, data

scientists, and software developers who want to build robust software solutions with machine learning components. If you're someone who manages or wants to understand the production life cycle of these systems, you'll find this book useful. Intermediate-level knowledge of Python is necessary.

[Learn Amazon SageMaker](#) - Julien Simon
2020-08-27

Quickly build and deploy machine learning models without managing infrastructure, and improve productivity using Amazon SageMaker's capabilities such as Amazon SageMaker Studio, Autopilot, Experiments, Debugger, and Model Monitor

Key Features

- Build, train, and deploy machine learning models quickly using Amazon SageMaker
- Analyze, detect, and receive alerts relating to various business problems using machine learning algorithms and techniques
- Improve productivity by training and fine-tuning machine learning models in production

Book Description

Amazon SageMaker enables you to quickly build, train, and deploy machine learning (ML) models at scale, without managing any infrastructure. It helps you focus on the ML problem at hand and deploy high-quality models by removing the heavy lifting typically involved in each step of the ML process. This book is a comprehensive guide for data scientists and ML developers who want to learn the ins and outs of Amazon SageMaker. You'll understand

how to use various modules of SageMaker as a single toolset to solve the challenges faced in ML. As you progress, you'll cover features such as AutoML, built-in algorithms and frameworks, and the option for writing your own code and algorithms to build ML models. Later, the book will show you how to integrate Amazon SageMaker with popular deep learning libraries such as TensorFlow and PyTorch to increase the capabilities of existing models. You'll also learn to get the models to production faster with minimum effort and at a lower cost. Finally, you'll explore how to use Amazon SageMaker Debugger to analyze, detect, and highlight problems to understand the current model state and improve model accuracy. By the end of this Amazon book, you'll be able to use Amazon SageMaker on the full spectrum of ML workflows, from experimentation, training, and monitoring to scaling, deployment, and automation. What you will learn

Create and automate end-to-end machine learning workflows on Amazon Web Services (AWS)

Become well-versed with data annotation and preparation techniques

Use AutoML features to build and train machine learning models with AutoPilot

Create models using built-in algorithms and frameworks and your own code

Train computer vision and NLP models using real-world examples

Cover training techniques for scaling, model optimization, model debugging, and cost optimization

Automate

deployment tasks in a variety of configurations using SDK and several automation tools

Who this book is for This book is for software engineers, machine learning developers, data scientists, and AWS users who are new to using Amazon SageMaker and want to build high-quality machine learning models without worrying about infrastructure. Knowledge of AWS basics is required to grasp the concepts covered in this book more effectively. Some understanding of machine learning concepts and the Python programming language will also be beneficial.

Data Science on AWS - Chris Fregly 2021-04-07

With this practical book, AI and machine learning practitioners will learn how to successfully build and deploy data science projects on Amazon Web Services. The Amazon AI and machine learning stack unifies data science, data engineering, and application development to help level up your skills. This guide shows you how to build and run pipelines in the cloud, then integrate the results into applications in minutes instead of days. Throughout the book, authors Chris Fregly and Antje Barth demonstrate how to reduce cost and improve performance. Apply the Amazon AI and ML stack to real-world use cases for natural language processing, computer vision, fraud detection, conversational devices, and more

Use automated machine learning to implement a specific subset of use cases with SageMaker

Autopilot Dive deep into the complete model

development lifecycle for a BERT-based NLP use case including data ingestion, analysis, model training, and deployment Tie everything together into a repeatable machine learning operations pipeline Explore real-time ML, anomaly detection, and streaming analytics on data streams with Amazon Kinesis and Managed Streaming for Apache Kafka Learn security best practices for data science projects and workflows including identity and access management, authentication, authorization, and more

Hands-On Transfer Learning with Python -

Dipanjan Sarkar 2018-08-31

Deep learning simplified by taking supervised, unsupervised, and reinforcement learning to the next level using the Python ecosystem Key Features Build deep learning models with transfer learning principles in Python implement transfer learning to solve real-world research problems Perform complex operations such as image captioning neural style transfer Book Description Transfer learning is a machine learning (ML) technique where knowledge gained during training a set of problems can be used to solve other similar problems. The purpose of this book is two-fold; firstly, we focus on detailed coverage of deep learning (DL) and transfer learning, comparing and contrasting the two with easy-to-follow concepts and examples. The second area of focus is real-world examples and research problems using TensorFlow, Keras, and the

Python ecosystem with hands-on examples. The book starts with the key essential concepts of ML and DL, followed by depiction and coverage of important DL architectures such as convolutional neural networks (CNNs), deep neural networks (DNNs), recurrent neural networks (RNNs), long short-term memory (LSTM), and capsule networks. Our focus then shifts to transfer learning concepts, such as model freezing, fine-tuning, pre-trained models including VGG, inception, ResNet, and how these systems perform better than DL models with practical examples. In the concluding chapters, we will focus on a multitude of real-world case studies and problems associated with areas such as computer vision, audio analysis and natural language processing (NLP). By the end of this book, you will be able to implement both DL and transfer learning principles in your own systems. What you will learn Set up your own DL environment with graphics processing unit (GPU) and Cloud support Delve into transfer learning principles with ML and DL models Explore various DL architectures, including CNN, LSTM, and capsule networks Learn about data and network representation and loss functions Get to grips with models and strategies in transfer learning Walk through potential challenges in building complex transfer learning models from scratch Explore real-world research problems related to computer vision and audio analysis Understand

how transfer learning can be leveraged in NLP
Who this book is for Hands-On Transfer Learning with Python is for data scientists, machine learning engineers, analysts and developers with an interest in data and applying state-of-the-art transfer learning methodologies to solve tough real-world problems. Basic proficiency in machine learning and Python is required.

Building Serverless Python Apps Using FastAPI and AWS - Eidan James Rosado 2022-06-01

There are varying ways one can pursue starting a new or converting an existing project to a Serverless architecture. One of the many arguments heard is that developers typically don't know where to begin. This book is intended for those seeking to leverage a Serverless set up with a FastAPI project. This book provides a step-by-step guide for building Python APIs on AWS using FastAPI, AWS CDK, GraphQL, and more! It aims to solve one of the more predominant causes of delaying the transition to Serverless by providing engineers with an outline of where to begin on their Serverless journey. Code samples are provided to demonstrate several avenues that can be taken as well as some housekeeping items like formatting and building the continuous integration and delivery pipeline. Readers also get end-of-chapter quizzes, cheat sheets, and access to the full source code from the examples in this book.

[Automate the Boring Stuff with Python, 2nd](#)

[Edition](#) - Al Sweigart 2019-11-12

The second edition of this best-selling Python book (over 500,000 copies sold!) uses Python 3 to teach even the technically uninclined how to write programs that do in minutes what would take hours to do by hand. There is no prior programming experience required and the book is loved by liberal arts majors and geeks alike. If you've ever spent hours renaming files or updating hundreds of spreadsheet cells, you know how tedious tasks like these can be. But what if you could have your computer do them for you? In this fully revised second edition of the best-selling classic Automate the Boring Stuff with Python, you'll learn how to use Python to write programs that do in minutes what would take you hours to do by hand--no prior programming experience required. You'll learn the basics of Python and explore Python's rich library of modules for performing specific tasks, like scraping data off websites, reading PDF and Word documents, and automating clicking and typing tasks. The second edition of this international fan favorite includes a brand-new chapter on input validation, as well as tutorials on automating Gmail and Google Sheets, plus tips on automatically updating CSV files. You'll learn how to create programs that effortlessly perform useful feats of automation to:

- Search for text in a file or across multiple files
- Create, update, move, and rename files and folders
- Search the

Web and download online content • Update and format data in Excel spreadsheets of any size • Split, merge, watermark, and encrypt PDFs • Send email responses and text notifications • Fill out online forms Step-by-step instructions walk you through each program, and updated practice projects at the end of each chapter challenge you to improve those programs and use your newfound skills to automate similar tasks. Don't spend your time doing work a well-trained monkey could do. Even if you've never written a line of code, you can make your computer do the grunt work. Learn how in Automate the Boring Stuff with Python, 2nd Edition.

Actionable Insights with Amazon QuickSight -

Manos Samatas 2022-01-28

Build interactive dashboards and storytelling reports at scale with the cloud-native BI tool that integrates embedded analytics and ML-powered insights effortlessly Key FeaturesExplore Amazon QuickSight, manage data sources, and build and share dashboardsLearn best practices from an AWS certified big data solutions architect Manage and monitor dashboards using the QuickSight API and other AWS services such as Amazon CloudTrailBook Description Amazon Quicksight is an exciting new visualization that rivals PowerBI and Tableau, bringing several exciting features to the table – but sadly, there aren't many resources out there that can help you learn the ropes. This book seeks to remedy that with the help of an

AWS-certified expert who will help you leverage its full capabilities. After learning QuickSight's fundamental concepts and how to configure data sources, you'll be introduced to the main analysis-building functionality of QuickSight to develop visuals and dashboards, and explore how to develop and share interactive dashboards with parameters and on-screen controls. You'll dive into advanced filtering options with URL actions before learning how to set up alerts and scheduled reports. Next, you'll familiarize yourself with the types of insights before getting to grips with adding ML insights such as forecasting capabilities, analyzing time series data, adding narratives, and outlier detection to your dashboards. You'll also explore patterns to automate operations and look closer into the API actions that allow us to control settings. Finally, you'll learn advanced topics such as embedded dashboards and multitenancy. By the end of this book, you'll be well-versed with QuickSight's BI and analytics functionalities that will help you create BI apps with ML capabilities. What you will learnUnderstand the wider AWS analytics ecosystem and how QuickSight fits within itSet up and configure data sources with Amazon QuickSightInclude custom controls and add interactivity to your BI application using parametersAdd ML insights such as forecasting, anomaly detection, and narrativesExplore patterns to automate operations using QuickSight

APIs Create interactive dashboards and
storytelling with Amazon QuickSight Design an
embedded multi-tenant analytics
architecture Focus on data permissions and how
to manage Amazon QuickSight operations Who
this book is for This book is for business
intelligence (BI) developers and data analysts
who are looking to create interactive dashboards

using data from Lake House on AWS with
Amazon QuickSight. It will also be useful for
anyone who wants to learn Amazon QuickSight in
depth using practical, up-to-date examples. You
will need to be familiar with general data
visualization concepts before you get started with
this book, however, no prior experience with
Amazon QuickSight is required.