

Lua Language For The Web

Definition Despite being a fast and powerful programming language, Lua is very easy to use and learn. Programmers can easily embed this language into their applications. The basic purpose of Lua's development was the creation of an embeddable lightweight scripting language that can be used in a variety of programming activities, such as web applications, image processing, and games. History of Lua A team of 3 members, namely Roberto Ierusalimsky, Waldemar Celes, and Luiz Henrique de Figueiredo, Computer Graphics Technology Group (Tecgraf) created Lua in year 1993 at the Pontifical Catholic University of Rio de Janeiro. The two core foundation stones that led towards the development of Lua were the data configuration and description languages, namely data-entry language (DEL), and Simple Object Language (SOL). Between the years 1992 and 1993 teams at Tecgraf independently developed these two languages for two different projects. Both of these projects were developed at Petrobras Company and were graphical designing tools for engineering applications. However, SOL and DEL lacked flow control structures, and Petrobras realised that there was need to add a full programming feature to these languages. The design of Lua 1.0 was developed in a manner that enabled its object constructors, which were a little bit different from the present time light weight and flexible object constructors. The control structures' syntax for Lua was taken from Modula to a great extent (as it consisted of the repeat/until, if, while loops). Part from that, the syntax was also influenced by a number of other languages, these included: CLU, C++, SNOBOL and AWK. The developers of Lua had stated, in one of the articles that was published in Dr. Dobb's Journal, that the decision to use tables as the primary data structure for Lua has been influenced by LISP and Scheme. This is because these languages had lists as their data structure mechanism, which is single and global in nature. Scheme has had increasing influence on the semantics of Lua with the passage of time. This influence can be evidently seen with the inclusion of full lexical scoping and anonymous functions in the language. The release of versions of Lua up till version 5.0 was made under a license that was similar to the BSD license. Afterwards, MIT license was used to make releases. This was applicable from the release of version 5.0.

Utilize Python microservices to break down your app development into bitesize pieces and deploy them as cloud services.

The Learning, Education & Games book series is perfect for any educator or developer seeking an introduction to research-driven best practices for using and designing games for learning. This volume, Bringing Games into Educational Contexts, delves into the challenges of creating games and implementing them in educational settings. This book covers relevant issues such as gamification, curriculum development, using games to support ASD (autism spectrum disorder) students, choosing games for the classroom and library, homeschooling and gameschooling, working with parents and policymakers, and choosing tools for educational game development. Learning, Education & Games: Bringing Games into Educational Contexts is the second in a series written and edited by members of the Learning, Education, and Games (LEG) special interest group of the IGDA (International Game Developers Association)."

Beginning Lua Programming John Wiley & Sons

This book provides a thorough overview of the Wisdom Web of Things (W2T), a holistic framework for computing and intelligence in an emerging hyper-world with a social-cyber-physical space. Fast-evolving Web intelligence research and development initiatives are now moving toward understanding the multifaceted nature of intelligence and incorporating it at the Web scale in a ubiquitous environment with data, connection and service explosion. The book focuses on the framework and methodology of W2T, as well as its applications in different problem domains, such as intelligent businesses, urban computing, social computing, brain

informatics and healthcare. From the researcher and developer perspectives, the book takes a systematic, structured view of various W2T facets and their overall contribution to the development of W2T as a whole. Written by leading international researchers, this book is an essential reference for researchers, educators, professionals, and tertiary HDR students working on the World Wide Web, ubiquitous computing, knowledge management, and business intelligence.

Take a practical approach to becoming a leading-edge Android developer, learning by example while combining the many technologies needed to create a successful, up-to-date web app. *Practical Android Projects* introduces the Android software development kit and development tools of the trade, and then dives into building cool-looking and fun apps that put Android's amazing capabilities to work. Android is the powerful, full-featured, open source mobile platform that powers phones like Google Nexus, Motorola Droid, Samsung Galaxy S, and a variety of HTC phones and tablet computers. This book helps you quickly get Android projects up and running with the free and open source Eclipse, NetBeans, and IntelliJ IDEA IDEs. Then you build and extend mobile applications using the Android SDK, Java, Scripting Layer for Android (SL4A), and languages such as Python, Ruby, Javascript/HTML, Flex/AIR, and Lua.

Use your Raspberry Pi to get smart about computing fundamentals In the 1980s, the tech revolution was kickstarted by a flood of relatively inexpensive, highly programmable computers like the Commodore. Now, a second revolution in computing is beginning with the Raspberry Pi. *Learning Computer Architecture with the Raspberry Pi* is the premier guide to understanding the components of the most exciting tech product available. Thanks to this book, every Raspberry Pi owner can understand how the computer works and how to access all of its hardware and software capabilities. Now, students, hackers, and casual users alike can discover how computers work with *Learning Computer Architecture with the Raspberry Pi*. This book explains what each and every hardware component does, how they relate to one another, and how they correspond to the components of other computing systems. You'll also learn how programming works and how the operating system relates to the Raspberry Pi's physical components. Co-authored by Eben Upton, one of the creators of the Raspberry Pi, this is a companion volume to the *Raspberry Pi User Guide* An affordable solution for learning about computer system design considerations and experimenting with low-level programming Understandable descriptions of the functions of memory storage, Ethernet, cameras, processors, and more Gain knowledge of computer design and operation in general by exploring the basic structure of the Raspberry Pi The Raspberry Pi was created to bring forth a new generation of computer scientists, developers, and architects who understand the inner workings of the computers that have become essential to our daily lives. *Learning Computer Architecture with the Raspberry Pi* is your gateway to the world of computer system design. If you're comfortable using the basic features of Lightroom, but really want to push the envelope with this powerful software, 'Inside Lightroom' by acclaimed photographer and Lightroom Beta-tester Richard Earney is a must-have. Bypassing the obvious features covered in a variety of existing Lightroom books, Richard focuses on customizing Lightroom to suit your workflow. For example, he covers using presets to automate the way Lightroom deals with photos, optimizing your Lightroom workflow for your own hardware and preferences. He covers sophisticated calibration techniques, helping you render your pictures accurately both onscreen and in print. Basically -- the hidden information for this powerful software. Unlike the other 'guides' on the market, this book doesn't tell you what you already know. Instead, it focuses on what you don't. 'Inside Lightroom' also showcases the brand-new features of the software, available only in Lightroom 2.0, so if you have recently upgraded from Lightroom 1, this book will help you reap the benefits of your investment. Practical, jargon-free and full of stunning images, Richard Earney's book should be on the shelf of every Lightroom user. This practical book provides everything you need to know about the Extensible

Messaging and Presence Protocol (XMPP). This open technology for real-time communication is used in many diverse applications such as instant messaging, Voice over IP, real-time collaboration, social networking, microblogging, lightweight middleware, cloud computing, and more. XMPP: The Definitive Guide walks you through the thought processes and design decisions involved in building a complete XMPP-enabled application, and adding real-time interfaces to existing applications. You'll not only learn simple yet powerful XMPP tools, but you'll also discover, through real-world developer stories, how common XMPP "building blocks" can help solve particular classes of problems. With this book, you will: Learn the basics of XMPP technologies, including architectural issues, addressing, and communication primitives Understand the terminology of XMPP and learn about the wealth of XMPP servers, clients, and code libraries Become familiar with the XMPP concepts and services you need to solve common problems Construct a complete business application or real-time service with XMPP Every day, more software developers and service providers are using XMPP for real-time applications, and with the help of XMPP: The Definitive Guide, you can, too.

This book constitutes a collection of selected contributions from the 11th International Conference on Perspectives in Business Informatics Research, BIR 2012, held in Nizhny Novgorod, Russia, in September 2012. The 15 papers presented in this volume were carefully reviewed and selected from 36 submissions. They have been organized in topical sections on: knowledge management and the Semantic Web; business and information systems development; business, people, and systems interoperability; and business intelligence.

If you play World of Warcraft, chances are you know what Deadly Boss Mods is: it's the most widely downloaded modification available for World of Warcraft, considered required software for many professional raid guilds, and arguably the most popular modern video game mod in history. Paul Emmerich, the author of Deadly Boss Mods, will take you from novice to elite with his approachable, up-to-date guide to building add-ons for the most popular video game in history. Using the powerful Lua scripting language and XML, you'll learn how to build and update powerful mods that can fundamentally remake your World of Warcraft experience and introduce you to the field of professional software development. Beginning Lua with World of Warcraft Add-ons teaches you the essentials of Lua and XML using exciting code examples that you can run and apply immediately. You'll gain competence in Lua specifics like tables and metatables and the imperative nature of Lua as a scripting language. More advanced techniques like file persistence, error handling, and script debugging are made clear as you learn everything within the familiar, exciting context of making tools that work in Azeroth. You'll not only learn all about the World of Warcraft application programming interface and programming, and gain coding skills that will make all your online friends think you're a coding god, but also gain hands-on Lua scripting experience that could translate into an exciting job in the video game industry!

Practical C++ Financial Programming is a hands-on book for programmers wanting to apply C++ to programming problems in the financial industry. The book explains those aspects of the language that are more frequently used in writing financial software, including the STL, templates, and various numerical libraries. The book also describes many of the important problems in financial engineering that are part of the day-to-day

work of financial programmers in large investment banks and hedge funds. The author has extensive experience in the New York City financial industry that is now distilled into this handy guide. Focus is on providing working solutions for common programming problems. Examples are plentiful and provide value in the form of ready-to-use solutions that you can immediately apply in your day-to-day work. You'll learn to design efficient, numerical classes for use in finance, as well as to use those classes provided by Boost and other libraries. You'll see examples of matrix manipulations, curve fitting, histogram generation, numerical integration, and differential equation analysis, and you'll learn how all these techniques can be applied to some of the most common areas of financial software development. These areas include performance price forecasting, optimizing investment portfolios, and more. The book style is quick and to-the-point, delivering a refreshing view of what one needs to master in order to thrive as a C++ programmer in the financial industry. Covers aspects of C++ especially relevant to financial programming. Provides working solutions to commonly-encountered problems in finance. Delivers in a refreshing and easy style with a strong focus on the practical.

This book constitutes the refereed proceedings of the 11th International Workshop on Groupware, CRIWG 2005, held in Porto de Galinhas, Brazil in September 2005. The 16 revised full papers and 13 revised short papers presented together with a keynote paper were carefully reviewed and selected from 67 submissions. The papers are organized in topical sections on groupware development, collaborative applications, workflow management, knowledge management, computer supported collaborative learning, group decision support systems, mobile collaborative work, and work modeling in CSCW.

This book constitutes the refereed proceedings of the 19th International Conference on Information and Communications Security, ICICS 2017, held in Beijing, China, in December 2017. The 43 revised full papers and 14 short papers presented were carefully selected from 188 submissions. The papers cover topics such as Formal Analysis and Randomness Test; Signature Scheme and Key Management; Algorithms; Applied Cryptography; Attacks and Attacks Defense; Wireless Sensor Network Security; Security Applications; Malicious Code Defense and Mobile Security; IoT Security; Healthcare and Industrial Control System Security; Privacy Protection; Engineering Issues of Crypto; Cloud and E-commerce Security; Security Protocols; Network Security.

The general trend of modern network devices towards greater intelligence and programmability is accelerating the development of systems that are increasingly autonomous and to a certain degree self-managing. Examples range from router scripting environments to fully programmable server blades. This has opened up a new field of computer science research, reflected in this new volume. This selection of contributions to the first ever international workshop on network-embedded management applications (NEMA) features six papers selected from submissions to the workshop, held in October 2010 at Niagara Falls, Canada. They represent a wide cross-section of the current work in this vital field of inquiry. Covering a diversity of perspectives, the volume's dual structure first of all examines the 'enablers' for NEMAs—the platforms, frameworks, and development environments which facilitate the evolution of network-embedded management and applications. The second section of

the book covers network-embedded applications that might both empower and benefit from such enabling platforms. These papers cover topics ranging from deciding where to best place management control functions inside a network to a discussion of how multi-core hardware processors can be leveraged for traffic filtering applications. The section concludes with an analysis of a delay-tolerant network application in the context of the 'One Laptop per Child' program. There is a growing recognition that it is vital to make network operation and administration as easy as possible to contain operational expenses and cope with ever shorter control cycles. This volume provides researchers in the field with the very latest in current thinking.

The Web is slowly but surely changing from a model in which a human reader browses content on web pages to a model in which services and clients (not necessarily humans) exchange information. And because of this, author Silvia Puglisi explains, it makes more sense to build platforms instead of just products or applications. Platforms are like ecosystems interconnecting different applications, services, users, developers, and partners, and offer many benefits. In this book, you'll learn how to design and develop Representational State Transfer (REST) platforms in Rails. You'll begin with an introduction to Ruby on Rails, and then move quickly through new concepts. At the end of each chapter, you'll have learned something new about building and organically extending a multi-service platform spanning different devices—and will have had some fun in the process. By the end of the book you'll know how to build an architecture composed of different services accessing shared resources through a set of collaborating APIs and applications. Explore the basics of REST and HTTP, including REST architecture and the role of hypermedia Get to know Rails and Ruby on Rails Learn about API development and create an API Take a thorough look at REST, including Asynchronous REST and testing RESTful services Work with data streams as you map them onto an application UI and integrate external APIs in your application Learn about device-independent development Use data analytics to recognize important events, develop key metrics, and track them Explore various tools you can use to build your own data analytic platform Learn how to scale a Rails application successfully Examine privacy and security issues and the implications of handling and collecting user data

This book looks at the science, technology and innovation systems of Argentina, Brazil, Chile and Mexico, telling the stories of sixteen university research teams from different fields of knowledge, working in very different national contexts, but having in common the experience of producing high quality scientific knowledge in their fields, while being very active in transferring their knowledge to society.

Take your idea from concept to production with this unique guide Whether it's called physical computing, ubiquitous computing, or the Internet of Things, it's a hot topic in technology: how to channel your inner Steve Jobs and successfully combine hardware, embedded software, web services, electronics, and cool design to create cutting-edge devices that are fun, interactive, and practical. If you'd like to create the next must-have product, this unique book is the perfect place to start. Both a creative and practical primer, it explores the platforms you can use to develop hardware or software, discusses design concepts that will make your products eye-catching and appealing, and shows you ways to scale

up from a single prototype to mass production. Helps software engineers, web designers, product designers, and electronics engineers start designing products using the Internet-of-Things approach Explains how to combine sensors, servos, robotics, Arduino chips, and more with various networks or the Internet, to create interactive, cutting-edge devices Provides an overview of the necessary steps to take your idea from concept through production If you'd like to design for the future, *Designing the Internet of Things* is a great place to start.

This book constitutes the refereed proceedings of the 8th International Conference on Internet and Distributed Computing Systems, IDCS 2015, held in Windsor, UK, in September 2015. The 19 revised full and 6 revised short papers presented were carefully reviewed and selected from 42 submissions. The selected contributions covered cutting-edge aspects of Cloud Computing and Internet of Things, sensor networks, parallel and distributed computing, advanced networking, smart cities and smart buildings, Big Data and social networks.

Computing Handbook, Third Edition: Computer Science and Software Engineering mirrors the modern taxonomy of computer science and software engineering as described by the Association for Computing Machinery (ACM) and the IEEE Computer Society (IEEE-CS). Written by established leading experts and influential young researchers, the first volume of this popular handbook examines the elements involved in designing and implementing software, new areas in which computers are being used, and ways to solve computing problems. The book also explores our current understanding of software engineering and its effect on the practice of software development and the education of software professionals. Like the second volume, this first volume describes what occurs in research laboratories, educational institutions, and public and private organizations to advance the effective development and use of computers and computing in today's world. Research-level survey articles provide deep insights into the computing discipline, enabling readers to understand the principles and practices that drive computing education, research, and development in the twenty-first century.

An examination of software practice in Brazil that reveals both the globalization and the localization of software development. Software development would seem to be a quintessential example of today's Internet-enabled "knowledge work"—a global profession not bound by the constraints of geography. In *Coding Places*, Yuri Takhteyev looks at the work of software developers who inhabit two contexts: a geographical area—in this case, greater Rio de Janeiro—and a "world of practice," a global system of activities linked by shared meanings and joint practice. The work of the Brazilian developers, Takhteyev discovers, reveals a paradox of the world of software: it is both diffuse and sharply centralized. The world of software revolves around a handful of places—in particular, the San Francisco Bay area—that exercise substantial control over both the material and cultural elements of software production. Takhteyev shows how in this context Brazilian software developers work to find their place in the world of software and

to bring its benefits to their city. Takhteyev's study closely examines Lua, an open source programming language developed in Rio but used in such internationally popular products as World of Warcraft and Angry Birds. He shows that Lua had to be separated from its local origins on the periphery in order to achieve success abroad. The developers, Portuguese speakers, used English in much of their work on Lua. By bringing to light the work that peripheral practitioners must do to give software its seeming universality, Takhteyev offers a revealing perspective on the not-so-flat world of globalization.

This book collects selected papers from the 7th Conference on Signal and Information Processing, Networking and Computers held in Rizhao, China, on September, 2020. The 7th International Conference on Signal and Information Processing, Networking and Computers (ICSINC) was held in Rizhao, China, on September, 2020.

There has never been a Scripting languages Guide like this. It contains 209 answers, much more than you can imagine; comprehensive answers and extensive details and references, with insights that have never before been offered in print. Get the information you need--fast! This all-embracing guide offers a thorough view of key knowledge and detailed insight. This Guide introduces what you want to know about Scripting languages. A quick look inside of some of the subjects covered: Server-side scripting, Visual Basic - Derivative languages, Comparison of C Sharp and Java - Constant/immutable parameters, Categorical list of programming languages - In object code, JScript, Syntax (programming languages) - Levels of syntax, Lua (programming language) - Extension and binding, Linux - Copyright, trademark, and naming, Software archaeology - Techniques, Reflection (computer programming), Interactive Voice Response - Technologies used, Dynamic HTML, Windows Management Instrumentation, Tk (framework) - History, Glue language - GUI scripting, Domain-specific language - Unix shell scripts, Very high-level programming language, Microsoft Speech API - SAPI 5 API family, Form (web) - Use with programming languages, Dynamic web page, Batch job - Modern systems, Lua (programming language) - Other, Interpreted language - List of frequently used interpreted languages, C++11 New string literals, Marshalling (computer science) - Usage, Microsoft Speech API - SAPI 5.1, Game design - Overview, Blue Gene - Architecture, Cross-browser - Background, Glue language - History, XMLHttpRequest, History of Microsoft - 1995-1999: Foray into the Web and other ventures, Open Scripting Architecture - Open Scripting Architecture, Multi-Threaded Apartment - Technical details, Active Directory - Unix integration, and much more...

So you have a great game idea for iPhone or iPad, but Objective-C just seems a bit daunting. What are your alternatives? The App Store is very picky about languages, but there is hope: Lua is a versatile, lightweight, fast, and easy to learn language that you can use to build your iOS games and get them accepted into the App Store. Learn Lua for iOS Game Development walks you through the

Lua basics, then shows you how to create games using the top Lua frameworks like Corona SDK, Gideros, Moai, and even how to create games on the iPad (not just for the iPad) with Codea. You aren't tied to Xcode and Objective-C -- you can create all sorts of amazing games with Lua. But if you already have an existing iOS game, you'll also learn how to integrate Lua to extend the game. If you're an aspiring or current iOS developer, you need to know Lua, and *Learn Lua for iOS Game Development* will give you just what you need to do that.

This book is for students and professionals who are intrigued by the prospect of learning and using a powerful language that provides a rich infrastructure for creating programs. No programming knowledge is necessary to benefit from this book except for the section on Lua bindings, which requires some familiarity with the C programming language. A certain comfort level with command-line operations, text editing, and directory structures is assumed. You need surprisingly little in the way of computer resources to learn and use Lua. This book focuses on Windows and Unix-like (including Linux) systems, but any operating system that supports a command shell should be suitable. You'll need a text editor to prepare and save Lua scripts. If you choose to extend Lua with libraries written in a programming language like C, you'll need a suitable software development kit. Many of these kits are freely available on the Internet but, unlike Lua, they can consume prodigious amounts of disk space and memory.

This two-volume set LNCS 3760/3761 constitutes the refereed proceedings of the three confederated conferences CoopIS 2005, DOA 2005, and ODBASE 2005 held as OTM 2005 in Agia Napa, Cyprus in October/November 2005. The 89 revised full and 7 short papers presented together with 3 keynote speeches were carefully reviewed and selected from a total of 360 submissions.

Corresponding with the three OTM 2005 main conferences CoopIS, DOA, and ODBASE, the papers are organized in topical sections on workflow, workflow and business processes, mining and filtering, petri nets and process management, information access and integrity, heterogeneity, semantics, querying and content delivery, Web services, agents, security, integrity and consistency, chain and collaboration management, Web services and service-oriented architectures, multicast and fault tolerance, communication services, techniques for application hosting, mobility, security and data persistence, component middleware, java environments, peer-to-peer computing architectures, aspect oriented middleware, information integration and modeling, query processing, ontology construction, metadata, information retrieval and classification, system verification and evaluation, and active rules and Web services.

This book constitutes the refereed proceedings of the Second International Conference of the Immersive Learning Network, iLRN 2016, held in Santa Barbara, CA, USA, in June/July 2016. The proceedings contain 9 full papers carefully reviewed and selected from 45 submissions and the best 5 special track papers. The papers focus on various applications of immersive technologies to learning.

This manual describes the installation, configuration and basic usage of the Match-IT manufacturing management software.

Contains lessons on cross-platform software development, covering such topics as portability techniques, source control, compilers, user interfaces, and scripting languages.

The #1 bestselling programming book is back with updated and expanded coverage of the newest release of WoW! World of Warcraft (WoW) is currently the world's largest massively multiplayer online role-playing game. The newest release, "Wrath of the Lich King," has created a demand for updated information on writing addons. This eagerly anticipated edition answers that request and is an essential reference for creating WoW addons. Written by a duo of authors who have each contributed a number of successful WoW addons, the book offers an overview of Lua and XML (the programming languages used to write addons) and includes coverage of specific pitfalls and common programming mistakes- and how to avoid them. Valuable examples show you detailed aspects of writing addons for WoW and demonstrate how to implement addon concepts such as variables, slash commands, secure templates, and more. World of Warcraft insiders share their techniques for writing addons for both the latest version of WoW as well as the new Wrath of the Lich King expansion set Guides you through the specific nuances of the WoW API with the use of detailed examples Discusses ways to distribute and host your WoW addons so others can download and use them Explains how to respond to events, create frames, and use the WoW API to interact with the game You'll be well on your way to creating exciting WoW addons with this comprehensive reference by your side. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

iPhone OS Development: Your visual blueprint for developing apps for Apple's mobile devices provides essential tips, tricks, and techniques for developing for the iPad, iPhone, or iPod touch. This book covers everything from the key features of the Objective-C language, to hands-on tips for getting the most from the Apple SDK, to inside information about programming the touch screen, accelerometer, GPS, graphics, sound, and connectivity. It includes all of the information a new developer needs to create her first application, and references facts for more experienced developers who need distilled information about the most important iPad, iPhone, and iPod touch technologies. Also included is a step by step guide to uploading products to the App Store, and designing projects that maximize buyer interest and sales potential. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Learn the basics of 3D modeling for the popular Farming Simulator game Do you want to get started with creating your own vehicles, maps, landscapes, and tools that you can use in the game and share with the Farming Simulator community? Then this is the resource for you! With the help of Jason van Gumster, you'll get up and running on everything you need to master 3D modeling and

simulation—and have fun while doing it! Inside, you'll find out how to create and edit maps, start using the material panel, customize your mods by adding texture, use the correct file-naming conventions, test your mod in single and multiplayer modes, get a grip on using Vehicle XML, and so much more. There's no denying that Farming Simulator players love modding—and now there's a trusted, friendly resource to help you take your modding skills to the next level and get even more out of your game. Written in plain English and packed with tons of step-by-step explanations, Farming Simulator Modding For Dummies is a great way to learn the ropes of 3D modeling with the tools available to you in the game. In no time, you'll be wowing your fellow gamers—and yourself—with custom, kick-butt mods. So what are you waiting for? Includes an easy-to-follow introduction to using the GIANTS 3D modeling tools Explains how to export models to Blender, Maya, 3DS Max, or FBX Provides tips for using the correct image format for textures Details how to use Photoshop and Audacity to create custom mods for Farming Simulator Whether you're one of the legions of rabid fans of the popular Farming Simulator game or just someone who wants to learn the basics of 3D modeling and animation, you'll find everything you need in this handy guide.

Authored by Roberto Ierusalimsky, the chief architect of the language, this volume covers all aspects of Lua 5---from the basics to its API with C---explaining how to make good use of its features and giving numerous code examples. (Computer Books)

A practical approach to conquering the complexities of Microservices using the Python tooling ecosystem About This Book A very useful guide for Python developers who are shifting to the new microservices-based development A concise, up-to-date guide to building efficient and lightweight microservices in Python using Flask, Tox, and other tools Learn to use Docker containers, CoreOS, and Amazon Web Services to deploy your services Who This Book Is For This book is for developers who have basic knowledge of Python, the command line, and HTTP-based application principles, and those who want to learn how to build, test, scale, and manage Python 3 microservices. No prior experience of writing microservices in Python is assumed. What You Will Learn Explore what microservices are and how to design them Use Python 3, Flask, Tox, and other tools to build your services using best practices Learn how to use a TDD approach Discover how to document your microservices Configure and package your code in the best way Interact with other services Secure, monitor, and scale your services Deploy your services in Docker containers, CoreOS, and Amazon Web Services In Detail We often deploy our web applications into the cloud, and our code needs to interact with many third-party services. An efficient way to build applications to do this is through microservices architecture. But, in practice, it's hard to get this right due to the complexity of all the pieces interacting with each other. This book will teach you how to overcome these issues and craft applications that are built as small standard units, using all the proven best practices and avoiding the usual traps. It's a practical book: you'll build everything using Python 3 and its amazing tooling ecosystem. You will understand the principles of TDD and apply them. You will use Flask, Tox, and other tools to build your services using best practices. You will learn how to secure connections between services, and how to script Nginx using Lua to build web application firewall features such as rate limiting. You will also familiarize yourself with Docker's role in microservices, and use Docker containers, CoreOS, and Amazon Web Services to deploy your services. This book will take you on a journey, ending with the creation of a complete Python application based on microservices. By the end of the book, you will be well versed with the fundamentals of building, designing, testing, and deploying your Python

