By Bill Lubanovic Introducing Python Modern Computing In Simple Packages 1st First Edition Paperback

When you have questions about C# 9.0 or .NET 5, this best-selling guide has the answers you need. C# is a language of unusual flexibility and breadth, but with its continual growth there's so much more to learn. In the tradition of O'Reilly's Nutshell guides, this thoroughly updated edition is simply the best one-volume reference to the C# language available today. Organized around concepts and use cases, C# 9.0 in a Nutshell provides intermediate and advanced programmers with a concise map of C# and .NET that also plumbs significant depths. Get up to speed on C#, from syntax and variables to advanced topics such as pointers, records, closures, and patterns Dig deep into LINQ with three chapters dedicated to the topic Explore concurrency and asynchrony, advanced threading, and parallel programming Work with .NET features, including regular expressions, networking, spans, reflection, and cryptography
Practical SQL is an approachable and fast-paced guide to SQL (Structured Query Language), the standard programming language for defining, organizing,

and exploring data in relational databases. The book focuses on using SQL to find the story your data tells, with the popular open-source database PostgreSQL and the pgAdmin interface as its primary tools. You'll first cover the fundamentals of databases and the SQL language, then build skills by analyzing data from the U.S. Census and other federal and state government agencies. With exercises and real-world examples in each chapter, this book will teach even those who have never programmed before all the tools necessary to build powerful databases and access information quickly and efficiently. You'll learn how to: - Create databases and related tables using your own data - Define the right data types for your information - Aggregate, sort, and filter data to find patterns - Use basic math and advanced statistical functions - Identify errors in data and clean them up - Import and export data using delimited text files - Write queries for geographic information systems (GIS) - Create advanced queries and automate tasks Learning SQL doesn't have to be dry and complicated. Practical SQL delivers clear examples with an easy-to-follow approach to teach you the tools you need to build and manage your own databases. This book uses PostgreSQL, but the SQL syntax is applicable to many database applications, including Microsoft SQL Server and MySQL.

Move from zero knowledge of programming to comfortably writing small to

medium-sized programs in Python. Fully updated for Python 3, with code and examples throughout, the book explains Python coding with an accessible, step-by-step approach designed to bring you comfortably into the world of software development. Real–world analogies make the material understandable, with a wide variety of well-documented examples to illustrate each concept. Along the way, you'll develop short programs through a series of coding challenges that reinforce the content of the chapters. Learn to Program with Python 3 guides you with material developed in the author's university computer science courses. The author's conversational style feels like you're working with a personal tutor. All material is thoughtfully laid out, each lesson building on previous ones. What You'll Learn Understand programming basics with Python, based on material developed in the author's college courses Learn core concepts: variables, functions, conditionals, loops, lists, strings, and more Explore example programs including simple games you can program and customize Build modules to reuse your own code Who This Book Is For This book assumes no prior programming experience, and would be appropriate as text for a high school or college introduction to computer science.

Like sysadmins before them, network engineers are finding that they cannot do their work manually anymore. As the field faces new protocols, technologies,

delivery models, and a pressing need for businesses to be more agile and flexible, network automation is becoming essential. This practical guide shows network engineers how to use a range of technologies and tools—including Linux, Python, JSON, and XML—to automate their systems through code. Network programming and automation will help you simplify tasks involved in configuring, managing, and operating network equipment, topologies, services, and connectivity. Through the course of the book, you'll learn the basic skills and tools you need to make this critical transition. This book covers: Python programming basics: data types, conditionals, loops, functions, classes, and modules Linux fundamentals to provide the foundation you need on your network automation journey Data formats and models: JSON, XML, YAML, and YANG for networking Jinja templating and its applicability for creating network device configurations The role of application programming interfaces (APIs) in network automation Source control with Git to manage code changes during the automation process How Ansible, Salt, and StackStorm open source automation tools can be used to automate network devices Key tools and technologies required for a Continuous Integration (CI) pipeline in network operations Best-selling author Al Sweigart shows you how to easily build over 80 fun programs with minimal code and maximum creativity. If you've mastered basic

Python syntax and you're ready to start writing programs, you'll find The Big Book of Small Python Projects both enlightening and fun. This collection of 81 Python projects will have you making digital art, games, animations, counting pro- grams, and more right away. Once you see how the code works, you'll practice re-creating the programs and experiment by adding your own custom touches. These simple, text-based programs are 256 lines of code or less. And whether it's a vintage screensaver, a snail-racing game, a clickbait headline generator, or animated strands of DNA, each project is designed to be self-contained so you can easily share it online. You'll create: • Hangman, Blackjack, and other games to play against your friends or the computer • Simulations of a forest fire, a million dice rolls, and a Japanese abacus • Animations like a virtual fish tank, a rotating cube, and a bouncing DVD logo screensaver • A first-person 3D maze game • Encryption programs that use ciphers like ROT13 and Vigenère to conceal text If you're tired of standard step-by-step tutorials, you'll love the learn-by-doing approach of The Big Book of Small Python Projects. It's proof that good things come in small programs!

One book that does the work of nine! Knowing your way around Microsoft Office requires you to be part mathematician, part storyteller, and part graphic designer—with some scheduling wizard and database architect sprinkled in. So

what do you do if these talents don't come naturally to you? Fear not! Office 2019 All-in-One For Dummies fills in the gaps and helps you create easy-to-read Word documents, smash numbers in Excel, tell your tale with PowerPoint, and keep it all organized with Outlook. With additional books covering Access, OneNote, and common Office tasks, this is the only Office book you need on your shelf. Get insight into tools common to all Office applications Find full coverage of Word, Excel, PowerPoint, Outlook, and Access Benefit from updated information based on the newest software release Discover the tricks Office pros use to enhance efficiency If you need to make sense of Office 2019and don't have time to waste, this is the all-in-one reference you'll want to keep close by!

Introducing PythonModern Computing in Simple PackagesO'Reilly Media Summary This third revision of Manning's popular The Quick Python Book offers a clear, crisp updated introduction to the elegant Python programming language and its famously easy-to-read syntax. Written for programmers new to Python, this latest edition includes new exercises throughout. It covers features common to other languages concisely, while introducing Python's comprehensive standard functions library and unique features in detail. Foreword by Nicholas Tollervey, Python Software Foundation. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the

Technology Initially Guido van Rossum's 1989 holiday project, Python has grown into an amazing computer language. It's a joy to learn and read, and powerful enough to handle everything from low-level system resources to advanced applications like deep learning. Elegantly simple and complete, it also boasts a massive ecosystem of libraries and frameworks. Python programmers are in high demand/mdash;you can't afford not to be fluent! About the Book The Quick Python Book, Third Edition is a comprehensive guide to the Python language by a Python authority, Naomi Ceder. With the personal touch of a skilled teacher, she beautifully balances details of the language with the insights and advice you need to handle any task. Extensive, relevant examples and learn-by-doing exercises help you master each important concept the first time through. Whether you're scraping websites or playing around with nested tuples, you'll appreciate this book's clarity, focus, and attention to detail. What's Inside Clear coverage of Python 3 Core libraries, packages, and tools In-depth exercises Five new data science-related chapters About the Reader Written for readers familiar with programming concepts--no Python experience assumed. About the Author Naomi Ceder is chair of the Python Software Foundation. She has been learning, using, and teaching Python since 2001. Table of Contents PART 1 - STARTING OUT 1. About Python 2. Getting started 3. The Quick Python overview PART 2 -

THE ESSENTIALS 4. The absolute basics 5. Lists, tuples, and sets 6. Strings 7. Dictionaries 8. Control flow 9. Functions 10. Modules and scoping rules 11. Python programs 12. Using the filesystem 13. Reading and writing files 14. Exceptions PART 3 - ADVANCED LANGUAGE FEATURES 15. Classes and object-oriented programming 16. Regular expressions 17. Data types as objects 18. Packages 19. Using Python libraries PART 4 - WORKING WITH DATA 20. Basic file wrangling 21. Processing data files 22. Data over the network 23. Saving data 24. Exploring data

About Book Python programming language book. This book contains every details regarding python basic knowledge. From installation of Python software in computer to Data file handling in Python. Every topic is covered. Pictorial explanation is also provided. Solved programs, unsolved questions for reader is also given. Every topic is explained in best possible way. content is from scratch to database handling.

Updated for both Python 3.4 and 2.7, this convenient pocket guide is the perfect on-the-job quick reference. You'll find concise, need-to-know information on Python types and statements, special method names, built-in functions and exceptions, commonly used standard library modules, and other prominent Python tools. The handy index lets you pinpoint exactly what you need. Written

by Mark Lutz—widely recognized as the world's leading Python trainer—Python Pocket Reference is an ideal companion to O'Reilly's classic Python tutorials, Learning Python and Programming Python, also written by Mark. This fifth edition covers: Built-in object types, including numbers, lists, dictionaries, and more Statements and syntax for creating and processing objects Functions and modules for structuring and reusing code Python's object-oriented programming tools Built-in functions, exceptions, and attributes Special operator overloading methods Widely used standard library modules and extensions Command-line options and development tools Python idioms and hints The Python SQL Database API

Learn web scraping and crawling techniques to access unlimited data from any web source in any format. With this practical guide, you'll learn how to use Python scripts and web APIs to gather and process data from thousands—or even millions—of web pages at once. Ideal for programmers, security professionals, and web administrators familiar with Python, this book not only teaches basic web scraping mechanics, but also delves into more advanced topics, such as analyzing raw data or using scrapers for frontend website testing. Code samples are available to help you understand the concepts in practice. Learn how to parse complicated HTML pages Traverse multiple pages and sites Get a general

overview of APIs and how they work Learn several methods for storing the data you scrape Download, read, and extract data from documents Use tools and techniques to clean badly formatted data Read and write natural languages Crawl through forms and logins Understand how to scrape JavaScript Learn image processing and text recognition

The user-friendly, object-oriented programming language Python is quickly becoming the most popular introductory programming language for both students and instructors. This updated Second Edition of Python Programming in Context provides a comprehensive, accessible introduction to Python fundamentals. An ideal first language for learners entering the rapidly expanding field of computer science, Python gives students a solid platform of key problem-solving skills that translate easily across programming languages. Building on essential concepts of computer science, and offering a plenitude of real-world examples, Python Programming in Context, Second Edition offers a thorough overview of multiple applied areas, including image processing, cryptography, astronomy, the Internet, and bioinformatics. The text's emphasis on problem-solving, extrapolation, and development of independent exploration and solution-building provides students with a unique and innovative approach to learning programming. Python Programming in Context, Second Edition is the ideal

introductory text for those delving into computer programming. Key Features - Utilizes Python 3 - Provides a clear, accessible, and skill-focused approach to programming with Python - Contains problem sets based on real-world examples and problem-solving rather than language features - Offers a variety of exercises that develop independent skill-building and exploration - Every new copy of the text is packaged with full student access to Turing's Craft Custom CodeLab. Customized to match the organization of the text, CodeLab offers students hands-on Python programming experience with immediate feedback. - Accompanied by a full suite of instructor support material, including solutions to the exercises in the text, downloadable source code, PowerPoint Lecture Outlines, and a complete Test Bank.

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

Easy to understand and fun to read, Introducing Python is ideal for beginning programmers as well as those new to the language. Author Bill Lubanovic takes you from the basics to more involved and varied topics, mixing tutorials with cookbook-style code recipes to explain concepts in Python 3. End-of-chapter exercises help you practice what you've learned. You'll gain a strong foundation in the language, including best practices for testing, debugging, code reuse, and other development tips. This book also shows you how to use Python for applications in business, science, and the arts, using various Python tools and open source packages. Learn simple data types, and basic math and text operations Use data-wrangling techniques with Python's built-in data structures

Explore Python code structure, including the use of functions Write large programs in Python, with modules and packages Dive into objects, classes, and other object-oriented features Examine storage from flat files to relational databases and NoSQL Use Python to build web clients, servers, APIs, and services Manage system tasks such as programs, processes, and threads Understand the basics of concurrency and network programming

Easy to understand and fun to read, this updated edition of Introducing Python is ideal for beginning programmers as well as those new to the language. Author Bill Lubanovic takes you from the basics to more involved and varied topics, mixing tutorials with cookbook-style code recipes to explain concepts in Python 3. End-of-chapter exercises help you practice what you've learned. You'll gain a strong foundation in the language, including best practices for testing, debugging, code reuse, and other development tips. This book also shows you how to use Python for applications in business, science, and the arts, using various Python tools and open source packages.

The Hands-On, Example-Rich Introduction to Pandas Data Analysis in Python Today, analysts must manage data characterized by extraordinary variety, velocity, and volume. Using the open source Pandas library, you can use Python to rapidly automate and perform virtually any data analysis task, no matter how

large or complex. Pandas can help you ensure the veracity of your data, visualize it for effective decision-making, and reliably reproduce analyses across multiple datasets. Pandas for Everyone brings together practical knowledge and insight for solving real problems with Pandas, even if you're new to Python data analysis. Daniel Y. Chen introduces key concepts through simple but practical examples, incrementally building on them to solve more difficult, real-world problems. Chen gives you a jumpstart on using Pandas with a realistic dataset and covers combining datasets, handling missing data, and structuring datasets for easier analysis and visualization. He demonstrates powerful data cleaning techniques, from basic string manipulation to applying functions simultaneously across dataframes. Once your data is ready, Chen guides you through fitting models for prediction, clustering, inference, and exploration. He provides tips on performance and scalability, and introduces you to the wider Python data analysis ecosystem. Work with DataFrames and Series, and import or export data Create plots with matplotlib, seaborn, and pandas Combine datasets and handle missing data Reshape, tidy, and clean datasets so they're easier to work with Convert data types and manipulate text strings Apply functions to scale data manipulations Aggregate, transform, and filter large datasets with groupby Leverage Pandas' advanced date and time capabilities Fit linear models using

statsmodels and scikit-learn libraries Use generalized linear modeling to fit models with different response variables Compare multiple models to select the "best" Regularize to overcome overfitting and improve performance Use clustering in unsupervised machine learning

Human-in-the-Loop Machine Learning lays out methods for humans and machines to work together effectively. Summary Most machine learning systems that are deployed in the world today learn from human feedback. However, most machine learning courses focus almost exclusively on the algorithms, not the human-computer interaction part of the systems. This can leave a big knowledge gap for data scientists working in real-world machine learning, where data scientists spend more time on data management than on building algorithms. Human-in-the-Loop Machine Learning is a practical guide to optimizing the entire machine learning process, including techniques for annotation, active learning, transfer learning, and using machine learning to optimize every step of the process. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Machine learning applications perform better with human feedback. Keeping the right people in the loop improves the accuracy of models, reduces errors in data, lowers costs, and helps you ship models faster. About the book Human-in-the-Loop Machine Learning lays out methods for humans and machines to work together effectively. You'll find best practices on selecting sample data for human feedback, quality control for human annotations, and designing annotation interfaces. You'll learn to create training data for labeling, object detection, and semantic segmentation, sequence labeling, and more. The book starts with the

basics and progresses to advanced techniques like transfer learning and self-supervision within annotation workflows. What's inside Identifying the right training and evaluation data Finding and managing people to annotate data Selecting annotation quality control strategies Designing interfaces to improve accuracy and efficiency About the author Robert (Munro) Monarch is a data scientist and engineer who has built machine learning data for companies such as Apple, Amazon, Google, and IBM. He holds a PhD from Stanford. Robert holds a PhD from Stanford focused on Human-in-the-Loop machine learning for healthcare and disaster response, and is a disaster response professional in addition to being a machine learning professional. A worked example throughout this text is classifying disaster-related messages from real disasters that Robert has helped respond to in the past. Table of Contents PART 1 - FIRST STEPS 1 Introduction to human-in-the-loop machine learning 2 Getting started with human-in-the-loop machine learning PART 2 - ACTIVE LEARNING 3 Uncertainty sampling 4 Diversity sampling 5 Advanced active learning 6 Applying active learning to different machine learning tasks PART 3 - ANNOTATION 7 Working with the people annotating your data 8 Quality control for data annotation 9 Advanced data annotation and augmentation 10 Annotation quality for different machine learning tasks PART 4 - HUMAN–COMPUTER INTERACTION FOR MACHINE LEARNING 11 Interfaces for data annotation 12 Human-in-the-loop machine learning products

The book offers a step by step approach to the fundamental and theoretical concepts of Python Programming. It nurtures practical understanding with numerous programs and illustratively solved examples.

Easy to understand and fun to read, this updated edition of Introducing Python is ideal for

beginning programmers as well as those new to the language. Author Bill Lubanovic takes you from the basics to more involved and varied topics, mixing tutorials with cookbook-style code recipes to explain concepts in Python 3. End-of-chapter exercises help you practice what you've learned. You'll gain a strong foundation in the language, including best practices for testing, debugging, code reuse, and other development tips. This book also shows you how to use Python for applications in business, science, and the arts, using various Python tools and open source packages.

Today, anyone in a scientific or technical discipline needs programming skills. Python is an ideal first programming language, and Introduction to Programming in Python is the best guide to learning it. Princeton University's Robert Sedgewick, Kevin Wayne, and Robert Dondero have crafted an accessible, interdisciplinary introduction to programming in Python that emphasizes important and engaging applications, not toy problems. The authors supply the tools needed for students to learn that programming is a natural, satisfying, and creative experience. This example-driven guide focuses on Python's most useful features and brings programming to life for every student in the sciences, engineering, and computer science. Coverage includes Basic elements of programming: variables, assignment statements, built-in data types, conditionals, loops, arrays, and I/O, including graphics and sound Functions, modules, and libraries: organizing programs into components that can be independently debugged, maintained, and reused Object-oriented programming and data abstraction: objects, modularity, encapsulation, and more Algorithms and data structures: sort/search algorithms, stacks, queues, and symbol tables Examples from applied math, physics, chemistry, biology, and computer science—all compatible with Python 2 and 3 Drawing on their

extensive classroom experience, the authors provide Q&As, exercises, and opportunities for creative practice throughout. An extensive amount of supplementary information is available at introcs.cs.princeton.edu/python. With source code, I/O libraries, solutions to selected exercises, and much more, this companion website empowers people to use their own computers to teach and learn the material.

In just 24 sessions of one hour or less, Sams Teach Yourself Python in 24 Hours will help you get started fast, master all the core concepts of programming, and build anything from websites to games. Using this book's straightforward, step-by-step approach, you'll move from the absolute basics through functions, objects, classes, modules, database integration, and more. Every lesson and case study application builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common Python development tasks. Quizzes and Exercises at the end of each chapter help you test your knowledge. Notes present interesting information related to the discussion. Tips offer advice or show you easier ways to perform tasks. Warnings alert you to possible problems and give you advice on how to avoid them. Learn how to… Install and run the right version of Python for your operating system Store, manipulate, reformat, combine, and organize information Create logic to control how programs run and what they do Interact with users or other programs, wherever they are Save time and improve reliability by creating reusable functions Master Python data types: numbers, text, lists, and dictionaries Write object-oriented programs that work better and are easier to improve Expand Python classes to make them even more powerful Use third-party modules to perform complex tasks without writing new code Split programs to make them more maintainable and reusable

Clearly document your code so others can work with it Store data in SQLite databases, write queries, and share data via JSON Simplify Python web development with the Flask framework Quickly program Python games with PyGame Avoid, troubleshoot, and fix problems with your code

Python for Software Design is a concise introduction to software design using the Python programming language. The focus is on the programming process, with special emphasis on debugging. The book includes a wide range of exercises, from short examples to substantial projects, so that students have ample opportunity to practice each new concept.

Get a comprehensive, in-depth introduction to the core Python language with this hands-on book. Based on author Mark Lutz's popular training course, this updated fifth edition will help you quickly write efficient, high-quality code with Python. It's an ideal way to begin, whether you're new to programming or a professional developer versed in other languages. Complete with quizzes, exercises, and helpful illustrations, this easy-to-follow, self-paced tutorial gets you started with both Python 2.7 and 3.3— the latest releases in the 3.X and 2.X lines—plus all other releases in common use today. You'll also learn some advanced language features that recently have become more common in Python code. Explore Python's major built-in object types such as numbers, lists, and dictionaries Create and process objects with Python statements, and learn Python's general syntax model Use functions to avoid code redundancy and package code for reuse Organize statements, functions, and other tools into larger components with modules Dive into classes: Python's object-oriented programming tool for structuring code Write large programs with Python's exception-handling model and development tools Learn advanced Python tools, including decorators, descriptors,

metaclasses, and Unicode processing

The Hitchhiker's Guide to Python takes the journeyman Pythonista to true expertise. More than any other language, Python was created with the philosophy of simplicity and parsimony. Now 25 years old, Python has become the primary or secondary language (after SQL) for many business users. With popularity comes diversity—and possibly dilution. This guide, collaboratively written by over a hundred members of the Python community, describes best practices currently used by package and application developers. Unlike other books for this audience, The Hitchhiker's Guide is light on reusable code and heavier on design philosophy, directing the reader to excellent sources that already exist.

Learn the fundamentals of Python (3.7) and how to apply it to data science, programming, and web development. Fully updated to include hands-on tutorials and projects. Key Features Learn the fundamentals of Python programming with interactive projects Apply Python to data science with tools such as IPython and Jupyter Utilize Python for web development and build a real-world app using Django Book Description Learn Python Programming is a quick, thorough, and practical introduction to Python - an extremely flexible and powerful programming language that can be applied to many disciplines. Unlike other books, it doesn't bore you with elaborate explanations of the basics but gets you up-and-running, using the language. You will begin by learning the fundamentals of Python so that you have a rock-solid foundation to build upon. You will explore the

foundations of Python programming and learn how Python can be manipulated to achieve results. Explore different programming paradigms and find the best approach to a situation; understand how to carry out performance optimization and effective debugging; control the flow of a program; and utilize an interchange format to exchange data. You'll also walk through cryptographic services in Python and understand secure tokens. Learn Python Programming will give you a thorough understanding of the Python language. You'll learn how to write programs, build websites, and work with data by harnessing Python's renowned data science libraries. Filled with real-world examples and projects, the book covers various types of applications, and concludes by building real-world projects based on the concepts you have learned. What you will learn Get Python up and running on Windows, Mac, and Linux Explore fundamental concepts of coding using data structures and control flow Write elegant, reusable, and efficient code in any situation Understand when to use the functional or OOP approach Cover the basics of security and concurrent/asynchronous programming Create bulletproof, reliable software by writing tests Build a simple website in Django Fetch, clean, and manipulate data Who this book is for Learn Python Programming is for individuals with relatively little experience in coding or Python. It's also ideal for aspiring programmers who need to write scripts or

programs to accomplish tasks. The book shows you how to create a full-fledged application.

Demonstrates the programming language's strength as a Web development tool, covering syntax, data types, built-ins, the Python standard module library, and real world examples.

When it comes to creating powerful and effective hacking tools, Python is the language of choice for most security analysts. But just how does the magic happen? In Black Hat Python, the latest from Justin Seitz (author of the best-selling Gray Hat Python), you'll explore the darker side of Python's capabilities—writing network sniffers, manipulating packets, infecting virtual machines, creating stealthy trojans, and more. You'll learn how to: –Create a trojan command-and-control using GitHub –Detect sandboxing and automate common malware tasks, like keylogging and screenshotting –Escalate Windows privileges with creative process control –Use offensive memory forensics tricks to retrieve password hashes and inject shellcode into a virtual machine –Extend the popular Burp Suite web-hacking tool –Abuse Windows COM automation to perform a man-in-the-browser attack –Exfiltrate data from a network most sneakily Insider techniques and creative challenges throughout show you how to extend the hacks and how to write your own exploits. When it comes to offensive

security, your ability to create powerful tools on the fly is indispensable. Learn how in Black Hat Python. Uses Python 2

Learn key topics such as language basics, pointers and pointer arithmetic, dynamic memory management, multithreading, and network programming. Learn how to use the compiler, the make tool, and the archiver.

Gain the confidence you need to apply machine learning in your daily work. With this practical guide, author Matthew Kirk shows you how to integrate and test machine learning algorithms in your code, without the academic subtext. Featuring graphs and highlighted code examples throughout, the book features tests with Python's Numpy, Pandas, Scikit-Learn, and SciPy data science libraries. If you're a software engineer or business analyst interested in data science, this book will help you: Reference real-world examples to test each algorithm through engaging, hands-on exercises Apply test-driven development (TDD) to write and run tests before you start coding Explore techniques for improving your machine-learning models with data extraction and feature development Watch out for the risks of machine learning, such as underfitting or overfitting data Work with K-Nearest Neighbors, neural networks, clustering, and other algorithms

If you're new to Java—or new to programming—this best-selling book will guide

you through the language features and APIs of Java 11. With fun, compelling, and realistic examples, authors Marc Loy, Patrick Niemeyer, and Daniel Leuck introduce you to Java fundamentals—including its class libraries, programming techniques, and idioms—with an eye toward building real applications. You'll learn powerful new ways to manage resources and exceptions in your applications—along with core language features included in recent Java versions. Develop with Java, using the compiler, interpreter, and other tools Explore Java's built-in thread facilities and concurrency package Learn text processing and the powerful regular expressions API Write advanced networked or web-based applications and services

Like it or not, JavaScript is everywhere these days—from browser to server to mobile—and now you, too, need to learn the language or dive deeper than you have. This concise book guides you into and through JavaScript, written by a veteran programmer who once found himself in the same position. Speaking JavaScript helps you approach the language with four standalone sections. First, a quick-start guide teaches you just enough of the language to help you be productive right away. More experienced JavaScript programmers will find a complete and easy-to-read reference that covers each language feature in depth. Complete contents include: JavaScript quick start: Familiar with object-oriented

programming? This part helps you learn JavaScript quickly and properly. JavaScript in depth: Learn details of ECMAScript 5, from syntax, variables, functions, and object-oriented programming to regular expressions and JSON with lots of examples. Pick a topic and jump in. Background: Understand JavaScript's history and its relationship with other programming languages. Tips, tools, and libraries: Survey existing style guides, best practices, advanced techniques, module systems, package managers, build tools, and learning resources.

Take full creative control of your web applications with Flask, the Python-based microframework. With this hands-on book, you'll learn Flask from the ground up by developing a complete social blogging application step-by-step. Author Miguel Grinberg walks you through the framework's core functionality, and shows you how to extend applications with advanced web techniques such as database migration and web service communication. Rather than impose development guidelines as other frameworks do, Flask leaves the business of extensions up to you. If you have Python experience, this book shows you how to take advantage of that creative freedom. Learn Flask's basic application structure and write an example app Work with must-have components—templates, databases, web forms, and email support Use packages and modules to structure a large

application that scales Implement user authentication, roles, and profiles Build a blogging feature by reusing templates, paginating item lists, and working with rich text Use a Flask-based RESTful API to expose app functionality to smartphones, tablets, and other third-party clients Learn how to run unit tests and enhance application performance Explore options for deploying your web app to a production server

While Excel remains ubiquitous in the business world, recent Microsoft feedback forums are full of requests to include Python as an Excel scripting language. In fact, it's the top feature requested. What makes this combination so compelling? In this hands-on guide, Felix Zumstein--creator of xlwings, a popular open source package for automating Excel with Python--shows experienced Excel users how to integrate these two worlds efficiently. Excel has added quite a few new capabilities over the past couple of years, but its automation language, VBA, stopped evolving a long time ago. Many Excel power users have already adopted Python for daily automation tasks. This guide gets you started. Use Python without extensive programming knowledge Get started with modern tools, including Jupyter notebooks and Visual Studio code Use pandas to acquire, clean, and analyze data and replace typical Excel calculations Automate tedious tasks like consolidation of Excel workbooks and production of Excel reports Use xlwings to build interactive Excel tools that use Python as a calculation engine Connect Excel to databases and CSV files and fetch data from the internet using Python code Use Python as a single tool to replace VBA, Power Query, and Power Pivot You Will Learn C! Zed Shaw has crafted the perfect course for the beginning C programmer

eager to advance their skills in any language. Follow it and you will learn the many skills early and junior programmers need to succeed–just like the hundreds of thousands of programmers Zed has taught to date! You bring discipline, commitment, persistence, and experience with any programming language; the author supplies everything else. In Learn C the Hard Way , you'll learn C by working through 52 brilliantly crafted exercises. Watch Zed Shaw's teaching video and read the exercise. Type his code precisely. (No copying and pasting!) Fix your mistakes. Watch the programs run. As you do, you'll learn what good, modern C programs look like; how to think more effectively about code; and how to find and fix mistakes far more efficiently. Most importantly, you'll master rigorous defensive programming techniques, so you can use any language to create software that protects itself from malicious activity and defects. Through practical projects you'll apply what you learn to build confidence in your new skills. Shaw teaches the key skills you need to start writing excellent C software, including Setting up a C environment Basic syntax and idioms Compilation, make files, and linkers Operators, variables, and data types Program control Arrays and strings Functions, pointers, and structs Memory allocation I/O and files Libraries Data structures, including linked lists, sort, and search Stacks and queues Debugging, defensive coding, and automated testing Fixing stack overflows, illegal memory access, and more Breaking and hacking your own C code It'll Be Hard at First. But Soon, You'll Just Get It–And That Will Feel Great! This tutorial will reward you for every minute you put into it. Soon, you'll know one of the world's most powerful programming languages. You'll be a C programmer.

Provides information on the Python 2.7 library offering code and output examples for working with such tasks as text, data types, algorithms, math, file systems, networking, XML, email,

and runtime.

Welcome to Scientific Python and its community. If you're a scientist who programs with Python, this practical guide not only teaches you the fundamental parts of SciPy and libraries related to it, but also gives you a taste for beautiful, easy-to-read code that you can use in practice. You'll learn how to write elegant code that's clear, concise, and efficient at executing the task at hand. Throughout the book, you'll work with examples from the wider scientific Python ecosystem, using code that illustrates principles outlined in the book. Using actual scientific data, you'll work on real-world problems with SciPy, NumPy, Pandas, scikit-image, and other Python libraries. Explore the NumPy array, the data structure that underlies numerical scientific computation Use quantile normalization to ensure that measurements fit a specific distribution Represent separate regions in an image with a Region Adjacency Graph Convert temporal or spatial data into frequency domain data with the Fast Fourier Transform Solve sparse matrix problems, including image segmentations, with SciPy's sparse module Perform linear algebra by using SciPy packages Explore image alignment (registration) with SciPy's optimize module Process large datasets with Python data streaming primitives and the Toolz library

In Pro Unity Game Development with C#, Alan Thorn, author of Learn Unity for 2D Game Development and experienced game developer, takes you through the complete C# workflow for developing a cross-platform first person shooter in Unity. C# is the most popular programming language for experienced Unity developers, helping them get the most out of what Unity offers. If you're already using C# with Unity and you want to take the next step in becoming an experienced, professional-level game developer, this is the book you need.

Whether you are a student, an indie developer, or a season game dev professional, you'll find helpful C# examples of how to build intelligent enemies, create event systems and GUIs, develop save-game states, and lots more. You'll understand and apply powerful programming concepts such as singleton classes, component based design, resolution independence, delegates, and event driven programming. By the end of the book, you will have a complete first person shooter game up and running with Unity. Plus you'll be equipped with the know-how and techniques needed to deploy your own professional-grade C# games. If you already know a bit of C# and you want to improve your Unity skills, this is just the right book for you. Python in easy steps instructs you how to program in the powerful Python language, giving complete examples that illustrate each aspect with colourized source code. Python in easy steps begins by explaining how to install the free Python interpreter so you can quickly begin to create your own executable programs by copying the book's examples. It demonstrates all the Python language basics before moving on to provide examples of Object Oriented Programming (OOP) and CGI scripting to handle web form data. The book concludes by demonstrating how you can use your acquired knowledge to create and deploy graphical windowed applications. Python in easy steps makes no assumption you have previous knowledge of any programming language so it's ideal for the newcomer to computer programming. It has an easy-to-follow style that will appeal to programmers moving from another programming language, and to the student who is studying Python programming at school or college, and to those seeking a career in computing who need a fundamental understanding of computer programming. Python is the language used to program the Raspberry Pi - covered by Raspberry Pi in easy steps.

This book is designed for use as a primary introduction to Python and can be used as an introductory text or as a resource for professionals in industry. The book has been divided into four sections. The first section deals with the language fundamentals, primarily the procedural part of the language, the second introduces the object-oriented paradigms, the third section deals with data structures, and the last is devoted to advanced topics like handling multi-dimensional arrays using NumPy and visualization using Matplotlib. Regular expressions and multi-threading have been introduced in the appendices. FEATURES • Includes sections dedicated to data structures • Offers in-depth treatment of topics such as classes, inheritance, BST, and NumPy • Introduces topics like Matplotlib and PIL • Contains exercises for practice and a review of essential programming concepts

Copyright: e1342f4f712e4740fd5cbccaeff8a9d5