

Guide To Learning Python Decorators Python Guides

Effective Computation in Physics Effective Python Dive Into Python Learning Python Design Patterns Python for Professionals Learning TensorFlow Python 101 Head First Python Practical Maya Programming with Python A Beginners Guide to Python 3 Programming Learning Python Fluent Python High Performance Python Python Cookbook Clean Code in Python Learn Python the Hard Way Python Programming Secret Recipes of the Python Ninja Programming Python Mastering Python The Hitchhiker's Guide to Python The Definitive Guide to Python Learning Python Design Patterns Building Machine Learning and Deep Learning Models on Google Cloud Platform A Python Book Expert Python Programming Mastering Object-oriented Python Professional Python Treading on Python Volume 2 Learn Python by Building Data Science Applications Treading on Python Volume 1 Learn Python Programming Learning Python by Building Games Python Tricks Learning IPython for Interactive Computing and Data Visualization Fluent Python Python 3 Object Oriented Programming Learning Python Python Without Fear

Effective Computation in Physics

Treading on Python is designed to bring developers and others who are anxious to learn Python up to speed quickly. Not only does it teach the basics of syntax, but it condenses years of experience. You will learn warts, gotchas, best practices and hints that have been gleaned through the years in days. You will hit the ground running and running in the right way.

Effective Python

★ Python Made Easy – a Step-by-Step Guide for Beginners ★ Most programmers learning Python are usually comfortable with some or the other programming language and are not interested in going through the typical learning curve of learning the first programming language. Instead, they are looking for something that gets them off the ground quickly. They are looking for similarities and differences in features that they have used in other language), plus what extra Python has to offer. This book should help them immensely. It guides you from the fundamentals of using modules through the use of advanced object orientation. Salient features: data types, control flow instructions, console input/output, strings, lists & tuples, list of comprehension, sets and dictionaries, dictionary comprehension, functions & lambdas, modules, classes and objects, inheritance, operator overloading, exception handling, file input/output, iterators and generators, decorators, command line parsing. Contents introduction to Python Python basics strings control flow instructions console input/output list tuples sets dictionaries function modules classes and objects intricacies of classes and objects inheritance exception handling file input/output miscellany. What This Book Offers Made for Beginners This guide is written specifically for

beginners. We take you step-by-step through writing your very first program, explaining each portion of code as we go along. We guide you through the workings of the Python IDE. Practical Examples With each concept, we provide one or more example to illustrate the topic in a way that makes it easy to understand. We break examples down into their basic workings, and provide the output for you to compare to your own results. Introduction to Python For newcomers to Python we look at what the language has to offer, its origin and design goals, features and capabilities, as well as the various Python editions, before stepping into more in-depth topics. Key Topics 1. Introduction 2. Python's Basic Syntax 3. Variable types 4. Basic Operators 5. Decision making of Python 6. Python's dictionary 7. Python Date and Time 8. Python functions 9. Python Files I/O 10. Operating System methods

Dive Into Python

Test your Python programming skills by solving real-world problems Key Features Access built-in documentation tools and improve your code. Discover how to make the best use of decorator and generator functions Enhance speed and improve concurrency by conjuring tricks from the PyPy project Book Description This book covers the unexplored secrets of Python, delve into its depths, and uncover its mysteries. You'll unearth secrets related to the implementation of the standard library, by looking at how modules actually work. You'll understand the implementation of collections, decimals, and fraction modules. If you haven't used decorators, coroutines, and generator functions much before, as you make your way through the recipes, you'll learn what you've been missing out on. We'll cover internal special methods in detail, so you understand what they are and how they can be used to improve the engineering decisions you make. Next, you'll explore the CPython interpreter, which is a treasure trove of secret hacks that not many programmers are aware of. We'll take you through the depths of the PyPy project, where you'll come across several exciting ways that you can improve speed and concurrency. Finally, we'll take time to explore the PEPs of the latest versions to discover some interesting hacks. What you will learn Know the differences between .py and .pyc files Explore the different ways to install and upgrade Python packages Understand the working of the PyPI module that enhances built-in decorators See how coroutines are different from generators and how they can simulate multithreading Grasp how the decimal module improves floating point numbers and their operations Standardize sub interpreters to improve concurrency Discover Python's built-in docstring analyzer Who this book is for Whether you've been working with Python for a few years or you're a seasoned programmer, you'll have a lot of new tricks to walk away with.

Learning Python Design Patterns

Best practices for designing, coding, and distributing your Python software.

Python for Professionals

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.

Learning TensorFlow

If you need help writing programs in Python 3, or want to update older Python 2 code, this book is just the ticket. Packed with practical recipes written and tested with Python 3.3, this unique cookbook is for experienced Python programmers who want to focus on modern tools and idioms. Inside, you'll find complete recipes for more than a dozen topics, covering the core Python language as well as tasks common to a wide variety of application domains. Each recipe contains code samples you can use in your projects right away, along with a discussion about how and why the solution works. Topics include: Data Structures and Algorithms Strings and Text Numbers, Dates, and Times Iterators and Generators Files and I/O Data Encoding and Processing Functions Classes and Objects Metaprogramming Modules and Packages Network and Web

Programming Concurrency Utility Scripting and System Administration Testing, Debugging, and Exceptions C Extensions

Python 101

Master the art of writing beautiful and powerful Python by using all of the features that Python 3.5 offers About This Book Become familiar with the most important and advanced parts of the Python code style Learn the trickier aspects of Python and put it in a structured context for deeper understanding of the language Offers an expert's-eye overview of how these advanced tasks fit together in Python as a whole along with practical examples Who This Book Is For Almost anyone can learn to write working script and create high quality code but they might lack a structured understanding of what it means to be 'Pythonic'. If you are a Python programmer who wants to code efficiently by getting the syntax and usage of a few intricate Python techniques exactly right, this book is for you. What You Will Learn Create a virtualenv and start a new project Understand how and when to use the functional programming paradigm Get familiar with the different ways the decorators can be written in Understand the power of generators and coroutines without digressing into lambda calculus Create metaclasses and how it makes working with Python far easier Generate HTML documentation out of documents and code using Sphinx Learn how to track and optimize application performance, both memory and cpu Use the multiprocessing library, not just locally but also across multiple machines Get a basic understanding of packaging and creating your own libraries/applications In Detail Python is a dynamic programming language. It is known for its high readability and hence it is often the first language learned by new programmers. Python being multi-paradigm, it can be used to achieve the same thing in different ways and it is compatible across different platforms. Even if you find writing Python code easy, writing code that is efficient, easy to maintain, and reuse is not so straightforward. This book is an authoritative guide that will help you learn new advanced methods in a clear and contextualised way. It starts off by creating a project-specific environment using venv, introducing you to different Pythonic syntax and common pitfalls before moving on to cover the functional features in Python. It covers how to create different decorators, generators, and metaclasses. It also introduces you to functools.wraps and coroutines and how they work. Later on you will learn to use asyncio module for asynchronous clients and servers. You will also get familiar with different testing systems such as py.test, doctest, and unittest, and debugging tools such as Python debugger and faulthandler. You will learn to optimize application performance so that it works efficiently across multiple machines and Python versions. Finally, it will teach you how to access C functions with a simple Python call. By the end of the book, you will be able to write more advanced scripts and take on bigger challenges. Style and Approach This book is a comprehensive guide that covers advanced features of the Python language, and communicate them with an authoritative understanding of the underlying rationale for how, when, and why to use them.

Head First Python

A guide to Python, the object-oriented scripting language, discusses the use of Python in Internet and web programming; address Python's C intergration tools; and features many examples that expand as new topics are introduced. Original. (Intermediate/Advanced)

Practical Maya Programming with Python

This document is a self learning document for a course in Python programming. This course contains (1) a part for beginners, (2) a discussion of several advanced topics that are of interest to Python programmers, and (3) a Pythonworkbook with lots of exercises.

A Beginners Guide to Python 3 Programming

Capturing a wealth of experience about the design of object-oriented software, four top-notch designers present a catalog of simple and succinct solutions to commonly occurring design problems. Previously undocumented, these 23 patterns allow designers to create more flexible, elegant, and ultimately reusable designs without having to rediscover the design solutions themselves. The authors begin by describing what patterns are and how they can help you design object-oriented software. They then go on to systematically name, explain, evaluate, and catalog recurring designs in object-oriented systems. With Design Patterns as your guide, you will learn how these important patterns fit into the software development process, and how you can leverage them to solve your own design problems most efficiently. Each pattern describes the circumstances in which it is applicable, when it can be applied in view of other design constraints, and the consequences and trade-offs of using the pattern within a larger design. All patterns are compiled from real systems and are based on real-world examples. Each pattern also includes code that demonstrates how it may be implemented in object-oriented programming languages like C++ or Smalltalk.

Learning Python

Practical Maya Programming with Python is a practical tutorial packed with plenty of examples and sample projects which guides you through building reusable, independent modules and handling unexpected errors. If you are a developer looking to build a powerful system using Python and Maya's capabilities, then this book is for you. Practical Maya Programming with Python is perfect for intermediate users with basic experience in Python and Maya who want to better their knowledge and skills.

Fluent Python

Jython is an open source implementation of the high-level, dynamic, object-oriented scripting language Python seamlessly integrated with the Java platform. The predecessor to Jython, JPython, is certified as 100% Pure Java. Jython is freely available for both commercial and noncommercial use and is distributed with source code. Jython is complementary to Java. The Definitive Guide to Jython, written by the official Jython team leads, covers Jython 2.5 (or 2.5.x)—from the basics to more advanced features. This book begins with a brief introduction to the language and then journeys through Jython's different features and uses. The Definitive Guide to Jython is organized for beginners as well as advanced users of the language. The book provides a general overview of the Jython language itself, but it also includes intermediate and advanced topics regarding database, web, and graphical user interface (GUI) applications; Web services/SOA; and integration, concurrency, and parallelism, to name a few.

High Performance Python

Learn to code like a professional with Python – an open source, versatile, and powerful programming language About This Book Learn the fundamentals of programming with Python – one of the best languages ever created Develop a strong set of programming skills that you will be able to express in any situation, on every platform, thanks to Python's portability Create outstanding applications of all kind, from websites to scripting, and from GUIs to data science Who This Book Is For Python is the most popular introductory teaching language in U.S. top computer science universities, so if you are new to software development, or maybe you have little experience, and would like to start off on the right foot, then this language and this book are what you need. Its amazing design and portability will help you become productive regardless of the environment you choose to work with. What You Will Learn Get Python up and running on Windows, Mac, and Linux in no time Grasp the fundamental concepts of coding, along with the basics of data structures and control flow. Write elegant, reusable, and efficient code in any situation Understand when to use the functional or the object oriented programming approach Create bulletproof, reliable software by writing tests to support your code Explore examples of GUIs, scripting, data science and web applications Learn to be independent, capable of fetching any resource you need, as well as dig deeper In Detail Learning Python has a dynamic and varied nature. It reads easily and lays a good foundation for those who are interested in digging deeper. It has a practical and example-oriented approach through which both the introductory and the advanced topics are explained. Starting with the fundamentals of programming and Python, it ends by exploring very different topics, like GUIs, web apps and data science. The book takes you all the way to creating a fully fledged application. The book begins by exploring the essentials of programming, data structures and teaches you how to manipulate them. It then moves on to controlling the flow of a program and writing reusable and error proof code. You will then explore different programming paradigms that will allow you to find the best approach to any situation, and also learn how to perform performance optimization as well as effective debugging. Throughout, the book steers you through the various types of applications, and it concludes with a complete mini website built upon all the concepts that you learned. Style and approach

This book is an easy-to-follow guide that will take you from a novice to the proficient level at a comfortable pace, using a lot of simple but effective examples. Each topic is explained thoroughly, and pointers are left for the more inquisitive readers to dig deeper and expand their knowledge.

Python Cookbook

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.

Clean Code in Python

Roughly inspired by the human brain, deep neural networks trained with large amounts of data can solve complex tasks with unprecedented accuracy. This practical book provides an end-to-end guide to TensorFlow, the leading open source software library that helps you build and train neural networks for computer vision, natural language processing (NLP), speech recognition, and general predictive analytics. Authors Tom Hope, Yehezkel Resheff, and Itay Lieder provide a hands-on approach to TensorFlow fundamentals for a broad technical audience—from data scientists and engineers to students and researchers. You'll begin by working through some basic examples in TensorFlow before diving deeper into topics such as neural network architectures, TensorBoard visualization, TensorFlow abstraction libraries, and multithreaded input pipelines. Once you finish this book, you'll know how to build and deploy production-ready deep learning systems in TensorFlow. Get up and running with TensorFlow, rapidly and painlessly Learn how to use TensorFlow to build deep learning models from the ground up Train popular deep learning models for computer vision and NLP Use extensive abstraction libraries to make development easier and faster Learn how to scale TensorFlow, and use clusters to distribute model training Deploy TensorFlow in a production setting

Learn Python the Hard Way

This book takes a tutorial-based and user-friendly approach to covering Python design patterns. Its concise presentation means that in a short space of time, you will get a good introduction to various design patterns. If you are an intermediate level Python user, this book is for you. Prior knowledge of Python programming is essential. Some knowledge of UML is also

required to understand the UML diagrams which are used to describe some design patterns.

Python Programming

Get started with Python for data analysis and numerical computing in the Jupyter notebook About This Book Learn the basics of Python in the Jupyter Notebook Analyze and visualize data with pandas, NumPy, matplotlib, and seaborn Perform highly-efficient numerical computations with Numba, Cython, and ipyparallel Who This Book Is For This book targets students, teachers, researchers, engineers, analysts, journalists, hobbyists, and all data enthusiasts who are interested in analyzing and visualizing real-world datasets. If you are new to programming and data analysis, this book is exactly for you. If you're already familiar with another language or analysis software, you will also appreciate this introduction to the Python data analysis platform. Finally, there are more technical topics for advanced readers. No prior experience is required; this book contains everything you need to know. What You Will Learn Install Anaconda and code in Python in the Jupyter Notebook Load and explore datasets interactively Perform complex data manipulations effectively with pandas Create engaging data visualizations with matplotlib and seaborn Simulate mathematical models with NumPy Visualize and process images interactively in the Jupyter Notebook with scikit-image Accelerate your code with Numba, Cython, and IPython.parallel Extend the Notebook interface with HTML, JavaScript, and D3 In Detail Python is a user-friendly and powerful programming language. IPython offers a convenient interface to the language and its analysis libraries, while the Jupyter Notebook is a rich environment well-adapted to data science and visualization. Together, these open source tools are widely used by beginners and experts around the world, and in a huge variety of fields and endeavors. This book is a beginner-friendly guide to the Python data analysis platform. After an introduction to the Python language, IPython, and the Jupyter Notebook, you will learn how to analyze and visualize data on real-world examples, how to create graphical user interfaces for image processing in the Notebook, and how to perform fast numerical computations for scientific simulations with NumPy, Numba, Cython, and ipyparallel. By the end of this book, you will be able to perform in-depth analyses of all sorts of data. Style and approach This is a hands-on beginner-friendly guide to analyze and visualize data on real-world examples with Python and the Jupyter Notebook.

Secret Recipes of the Python Ninja

Do you want to take your Python to the next level? Python is easy to learn. You can learn the basics in a day and be productive with it. But there are more advanced constructs that you will eventually run across if you spend enough time with it. Don't be confused by these. Learn them, embrace them, and improve your code and others.

Programming Python

Python's simplicity lets you become productive quickly, but this often means you aren't using everything it has to offer. With this hands-on guide, you'll learn how to write effective, idiomatic Python code by leveraging its best—and possibly most neglected—features. Author Luciano Ramalho takes you through Python's core language features and libraries, and shows you how to make your code shorter, faster, and more readable at the same time. Many experienced programmers try to bend Python to fit patterns they learned from other languages, and never discover Python features outside of their experience. With this book, those Python programmers will thoroughly learn how to become proficient in Python 3. This book covers: Python data model: understand how special methods are the key to the consistent behavior of objects Data structures: take full advantage of built-in types, and understand the text vs bytes duality in the Unicode age Functions as objects: view Python functions as first-class objects, and understand how this affects popular design patterns Object-oriented idioms: build classes by learning about references, mutability, interfaces, operator overloading, and multiple inheritance Control flow: leverage context managers, generators, coroutines, and concurrency with the concurrent.futures and asyncio packages Metaprogramming: understand how properties, attribute descriptors, class decorators, and metaclasses work

Mastering Python

More physicists today are taking on the role of software developer as part of their research, but software development isn't always easy or obvious, even for physicists. This practical book teaches essential software development skills to help you automate and accomplish nearly any aspect of research in a physics-based field. Written by two PhDs in nuclear engineering, this book includes practical examples drawn from a working knowledge of physics concepts. You'll learn how to use the Python programming language to perform everything from collecting and analyzing data to building software and publishing your results. In four parts, this book includes: Getting Started: Jump into Python, the command line, data containers, functions, flow control and logic, and classes and objects Getting It Done: Learn about regular expressions, analysis and visualization, NumPy, storing data in files and HDF5, important data structures in physics, computing in parallel, and deploying software Getting It Right: Build pipelines and software, learn to use local and remote version control, and debug and test your code Getting It Out There: Document your code, process and publish your findings, and collaborate efficiently; dive into software licenses, ownership, and copyright procedures

The Hitchhiker's Guide to Python

Understand the constructs of the Python programming language and use them to build data science projects Key Features Learn the basics of developing applications with Python and deploy your first data application Take your first steps in Python programming by understanding and using data structures, variables, and loops Delve into Jupyter, NumPy, Pandas,

SciPy, and sklearn to explore the data science ecosystem in Python Book Description Python is the most widely used programming language for building data science applications. Complete with step-by-step instructions, this book contains easy-to-follow tutorials to help you learn Python and develop real-world data science projects. The “secret sauce” of the book is its curated list of topics and solutions, put together using a range of real-world projects, covering initial data collection, data analysis, and production. This Python book starts by taking you through the basics of programming, right from variables and data types to classes and functions. You’ll learn how to write idiomatic code and test and debug it, and discover how you can create packages or use the range of built-in ones. You’ll also be introduced to the extensive ecosystem of Python data science packages, including NumPy, Pandas, scikit-learn, Altair, and Datashader. Furthermore, you’ll be able to perform data analysis, train models, and interpret and communicate the results. Finally, you’ll get to grips with structuring and scheduling scripts using Luigi and sharing your machine learning models with the world as a microservice. By the end of the book, you’ll have learned not only how to implement Python in data science projects, but also how to maintain and design them to meet high programming standards. What you will learn Code in Python using Jupyter and VS Code Explore the basics of coding – loops, variables, functions, and classes Deploy continuous integration with Git, Bash, and DVC Get to grips with Pandas, NumPy, and scikit-learn Perform data visualization with Matplotlib, Altair, and Datashader Create a package out of your code using poetry and test it with PyTest Make your machine learning model accessible to anyone with the web API Who this book is for If you want to learn Python or data science in a fun and engaging way, this book is for you. You’ll also find this book useful if you’re a high school student, researcher, analyst, or anyone with little or no coding experience with an interest in the subject and courage to learn, fail, and learn from failing. A basic understanding of how computers work will be useful.

The Definitive Guide to Jython

This Python coding book will help you understand the problems that arise due to inefficient code, demonstrating to you how to correct them.

Learning Python

Learn how to program with Python from beginning to end. This book is for beginners who want to get up to speed quickly and become intermediate programmers fast!

Design Patterns

"I don't even feel like I've scratched the surface of what I can do with Python" With Python Tricks: The Book you'll discover

Python's best practices and the power of beautiful & Pythonic code with simple examples and a step-by-step narrative. You'll get one step closer to mastering Python, so you can write beautiful and idiomatic code that comes to you naturally. Learning the ins and outs of Python is difficult-and with this book you'll be able to focus on the practical skills that really matter. Discover the "hidden gold" in Python's standard library and start writing clean and Pythonic code today. Who Should Read This Book: If you're wondering which lesser known parts in Python you should know about, you'll get a roadmap with this book. Discover cool (yet practical!) Python tricks and blow your coworkers' minds in your next code review. If you've got experience with legacy versions of Python, the book will get you up to speed with modern patterns and features introduced in Python 3 and backported to Python 2. If you've worked with other programming languages and you want to get up to speed with Python, you'll pick up the idioms and practical tips you need to become a confident and effective Pythonista. If you want to make Python your own and learn how to write clean and Pythonic code, you'll discover best practices and little-known tricks to round out your knowledge. What Python Developers Say About The Book: "I kept thinking that I wished I had access to a book like this when I started learning Python many years ago." - Mariatta Wijaya, Python Core Developer "This book makes you write better Python code!" - Bob Belderbos, Software Developer at Oracle "Far from being just a shallow collection of snippets, this book will leave the attentive reader with a deeper understanding of the inner workings of Python as well as an appreciation for its beauty." - Ben Felder, Pythonista "It's like having a seasoned tutor explaining, well, tricks!" - Daniel Meyer, Sr. Desktop Administrator at Tesla Inc.

Building Machine Learning and Deep Learning Models on Google Cloud Platform

Ever wished you could learn Python from a book? Head First Python is a complete learning experience for Python that helps you learn the language through a unique method that goes beyond syntax and how-to manuals, helping you understand how to be a great Python programmer. You'll quickly learn the language's fundamentals, then move onto persistence, exception handling, web development, SQLite, data wrangling, and Google App Engine. You'll also learn how to write mobile apps for Android, all thanks to the power that Python gives you. We think your time is too valuable to waste struggling with new.

A Python Book

Google and YouTube use Python because it's highly adaptable, easy to maintain, and allows for rapid development. If you want to write high-quality, efficient code that's easily integrated with other languages and tools, this hands-on book will help you be productive with Python quickly -- whether you're new to programming or just new to Python. It's an easy-to-follow self-paced tutorial, based on author and Python expert Mark Lutz's popular training course. Each chapter contains a stand-alone lesson on a key component of the language, and includes a unique Test Your Knowledge section with practical

exercises and quizzes, so you can practice new skills and test your understanding as you go. You'll find lots of annotated examples and illustrations to help you get started with Python 3.0. Learn about Python's major built-in object types, such as numbers, lists, and dictionaries Create and process objects using Python statements, and learn Python's general syntax model Structure and reuse code using functions, Python's basic procedural tool Learn about Python modules: packages of statements, functions, and other tools, organized into larger components Discover Python's object-oriented programming tool for structuring code Learn about the exception-handling model, and development tools for writing larger programs Explore advanced Python tools including decorators, descriptors, metaclasses, and Unicode processing

Expert Python Programming

This textbook on Python 3 explains concepts such as variables and what they represent, how data is held in memory, how a for loop works and what a string is. It also introduces key concepts such as functions, modules and packages as well as object orientation and functional programming. Each section is prefaced with an introductory chapter, before continuing with how these ideas work in Python. Topics such as generators and coroutines are often misunderstood and these are explained in detail, whilst topics such as Referential Transparency, multiple inheritance and exception handling are presented using examples. A Beginners Guide to Python 3 Programming provides all you need to know about Python, with numerous examples provided throughout including several larger worked case studies illustrating the ideas presented in the previous chapters.

Mastering Object-oriented Python

You Will Learn Python! Zed Shaw has perfected the world's best system for learning Python. Follow it and you will succeed- just like the hundreds of thousands of beginners Zed has taught to date! You bring the discipline, commitment, and persistence; the author supplies everything else. In Learn Python the Hard Way, Third Edition, 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 software works; what good programs look like; how to read, write, and think about code; and how to find and fix your mistakes using tricks professional programmers use. Most importantly, you'll learn the following, which you need to start writing excellent Python software of your own: Installing a complete Python environment Organizing and writing code Basic mathematics Variables Strings and text Interacting with users Working 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 Debugging 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 tutorial 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. Watch Zed, too! The accompanying DVD contains 5+ hours of passionate, powerful teaching: a complete Python video course!

Professional Python

Your Python code may run correctly, but you need it to run faster. Updated for Python 3, this expanded edition shows you how to locate performance bottlenecks and significantly speed up your code in high-data-volume programs. By exploring the fundamental theory behind design choices, High Performance Python helps you gain a deeper understanding of Python's implementation. How do you take advantage of multicore architectures or clusters? Or build a system that scales up and down without losing reliability? Experienced Python programmers will learn concrete solutions to many issues, along with war stories from companies that use high-performance Python for social media analytics, productionized machine learning, and more. Get a better grasp of NumPy, Cython, and profilers Learn how Python abstracts the underlying computer architecture Use profiling to find bottlenecks in CPU time and memory usage Write efficient programs by choosing appropriate data structures Speed up matrix and vector computations Use tools to compile Python down to machine code Manage multiple I/O and computational operations concurrently Convert multiprocessing code to run on local or remote clusters Deploy code faster using tools like Docker

Treading on Python Volume 2

This book follows a standard tutorial approach with approximately 750 code samples spread through the 19 chapters. This amounts to over 5,900 lines of code that illustrate each concept. This book is aimed at programmers who have already learned the basics of object-oriented Python and need to write more sophisticated, flexible code that integrates seamlessly with the rest of Python. This book assumes a computer science background, with experience of common Python design patterns.

Learn Python by Building Data Science Applications

Explore modern game development and programming techniques to build games using Python and its popular libraries such as Pygame and PyOpenGL Key Features Learn game development and Python through a practical, example-driven approach Discover a variety of game development techniques to build games that gradually increase in complexity Leverage popular Python gaming libraries such as Pygame, PyOpenGL, Pymunk, and Pyglet Book Description A fun and interactive way to get started with the Python language and its libraries is by getting hands-on with game development. Learning Python by Building Games brings you the best of both worlds. The book will first introduce you to Python

fundamentals, which you will then use to develop a basic game. You'll gradually explore the different Python libraries best suited for game development such as Pygame, Pyglet, and PyOpenGL. From building game characters through to using 3D animation techniques, you'll discover how to create an aesthetic game environment. In addition to this, you'll focus on game physics to give your effects a realistic feel, complete with movements and collisions. The book will also cover how you can use particle systems to simulate phenomena such as an explosion or smoke. In later chapters, you will gain insights into object-oriented programming by modifying a snake game, along with exploring GUI programming to build a user interface with Python's turtle module. By the end of this book, you'll be well-versed with Python programming concepts and popular libraries, and have the confidence to build your own games

What you will learn

- Explore core Python concepts by understanding Python libraries
- Build your first 2D game using Python scripting
- Understand concepts such as decorators and properties in the Python ecosystem
- Create animations and movements by building a Flappy Bird-like game
- Design game objects and characters using Pygame, PyOpenGL, and Pymunk
- Add intelligence to your gameplay by incorporating game artificial intelligence (AI) techniques using Python

Who this book is for

If you are completely new to Python or game programming and want to develop your programming skills, then this book is for you. The book also acts as a refresher for those who already have experience of using Python and want to learn how to build exciting games.

Treading on Python Volume 1

"It's easy to start writing code with Python: that's why the language is so immensely popular. However, Python has unique strengths, charms, and expressivity that can be hard to grasp at first -- as well as hidden pitfalls that can easily trip you up if you aren't aware of them. Effective Python will help you harness the full power of Python to write exceptionally robust, efficient, maintainable, and well-performing code. Utilizing the concise, scenario-driven style pioneered in Scott Meyers's best-selling Effective C++, Brett Slatkin brings together 53 Python best practices, tips, shortcuts, and realistic code examples from expert programmers. Through realistic examples, Slatkin uncovers little-known Python quirks, intricacies, and idioms that powerfully impact code behavior and performance. You'll learn how to choose the most efficient and effective way to accomplish key tasks when multiple options exist, and how to write code that's easier to understand, maintain, and improve. Drawing on his deep understanding of Python's capabilities, Slatkin offers practical advice for each major area of development with both Python 3.x and Python 2.x. Coverage includes: * Algorithms * Objects * Concurrency * Collaboration * Built-in modules * Production techniques * And more Each section contains specific, actionable guidelines organized into items, each with carefully worded advice supported by detailed technical arguments and illuminating examples. Using Effective Python, you can systematically improve all the Python code you write: not by blindly following rules or mimicking incomprehensible idioms, but by gaining a deep understanding of the technical reasons why they make sense."--[Source inconnue].

Learn Python Programming

* Quick start to learning python—very example oriented approach * Book has its own Web site established by the author: <http://diveintopython.org/> Author is well known in the Open Source community and the book has a unique quick approach to learning an object oriented language.

Learning Python by Building Games

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

Python Tricks

TAGLINE Learn to be a Python expert in ten easy lessons! **DESCRIPTION** This book is intended for the professional programmer who wants to learn Python for their place of business, or simply to extend their knowledge. You will learn the basics of the language--from how to define variables and implement looping and conditional constructs, to working with existing code. Once we have established the baseline for writing code in Python, you'll learn how to create your own functions and classes, how to extend existing code, and how to work with Python-specific things like comprehensions and generators. With a solid foundation, you will then move on to learn about the existing Python libraries, called packages, and how to use them, as well as discovering little tips and tricks that will make you a hit with all the programmers at work, and really aid you in nailing that programming interview. **KEY FEATURES** Acquire knowledge of Python programming simply and easily. Learn about object-oriented programming and how it applies to Python. Make a splash with list comprehensions, generators, and decorators. Learn about file processing with Python, and how it makes JSON easy to deal with. Work with dictionaries and sets quickly and easily. Learn about what others have made available in the Python world. Pick up tricks

and tips that will make you look like a Python expert in no time. **WHAT WILL YOU LEARN** By the time you have finished this book, you will know enough to write complex Python programs and work with existing Python code. You will find out about the packages that make Python one of the most popular programming languages and will understand the “Pythonic” way of thinking and programming. **WHO THIS BOOK IS FOR** This book is designed for programmers who have experience in at least one programming language. No prior Python experience is necessary, but it is assumed that you understand the basics of loops, conditionals and object-oriented constructs, such as classes. You should have or have access to a system that runs Python 3 (any version). **Table of Contents** 1. The history and installation of Python 2. Python types and constructs 3. The Nuts and Bolts 4. Structuring your Python projects 5. Object-oriented programming with Python 6. Advanced manipulations 7. File input and output 8. Imports and Exports 9. Miscellaneous 10. Not re-inventing the wheel 11. Tips and Tricks

Learning IPython for Interactive Computing and Data Visualization

Harness the power of Python 3 objects.

Fluent Python

With hands-on tutorials based on real-world scenarios, this useful guide goes beyond the basics to teach beginner- and intermediate-level Python programmers the little-known tools and constructs that build concise, maintainable code. --

Python 3 Object Oriented Programming

Take a systematic approach to understanding the fundamentals of machine learning and deep learning from the ground up and how they are applied in practice. You will use this comprehensive guide for building and deploying learning models to address complex use cases while leveraging the computational resources of Google Cloud Platform. Author Ekaba Bisong shows you how machine learning tools and techniques are used to predict or classify events based on a set of interactions between variables known as features or attributes in a particular dataset. He teaches you how deep learning extends the machine learning algorithm of neural networks to learn complex tasks that are difficult for computers to perform, such as recognizing faces and understanding languages. And you will know how to leverage cloud computing to accelerate data science and machine learning deployments. *Building Machine Learning and Deep Learning Models on Google Cloud Platform* is divided into eight parts that cover the fundamentals of machine learning and deep learning, the concept of data science and cloud services, programming for data science using the Python stack, Google Cloud Platform (GCP) infrastructure and products, advanced analytics on GCP, and deploying end-to-end machine learning solution pipelines on GCP. **What You'll Learn** Understand the principles and fundamentals of machine learning and deep learning, the algorithms, how to use them,

when to use them, and how to interpret your results Know the programming concepts relevant to machine and deep learning design and development using the Python stack Build and interpret machine and deep learning models Use Google Cloud Platform tools and services to develop and deploy large-scale machine learning and deep learning products Be aware of the different facets and design choices to consider when modeling a learning problem Productionalize machine learning models into software products Who This Book Is For Beginners to the practice of data science and applied machine learning, data scientists at all levels, machine learning engineers, Google Cloud Platform data engineers/architects, and software developers

Learning Python

Praise for this book, Python Without Fear “This is really a great book. I wish I’d had it when I was learning Python.” –John M. Wargo, author of Apache Cordova 4 Programming Praise for the previous book in the series, C++ Without Fear “I’m in love with your C++ Without Fear book. It keeps me awake for hours during the night. Thanks to you, I got most of the idea in just a few hours.” –Laura Viral, graduate physics student at CERN and Istanbul, Turkey “It’s hard to tell where I began and ended with your book. I felt like I woke up and literally knew how to write C++ code. I can’t overstate the confidence you gave me.” – Danny Grady, senior programmer/analyst at a Fortune 500 Company Whether you’re new to programming or moving from another language, Python Without Fear will quickly make you productive! Brian Overland’s unique approach to Python includes: Taking you by the hand while teaching topics from the very basics to intermediate and advanced features of Python Teaching by examples that are explained line by line Heavy emphasis on examples that are fun and useful, including games, graphics, database applications, file storage, puzzles, and more! How to think “Pythonically” and avoid common “gotchas” Register your product at informit.com/register for convenient access to downloads, updates, and/or corrections as they become available.

Python Without Fear

Python’s simplicity lets you become productive quickly, but this often means you aren’t using everything it has to offer. With this hands-on guide, you’ll learn how to write effective, idiomatic Python code by leveraging its best—and possibly most neglected—features. Author Luciano Ramalho takes you through Python’s core language features and libraries, and shows you how to make your code shorter, faster, and more readable at the same time. Many experienced programmers try to bend Python to fit patterns they learned from other languages, and never discover Python features outside of their experience. With this book, those Python programmers will thoroughly learn how to become proficient in Python 3. This book covers: Python data model: understand how special methods are the key to the consistent behavior of objects Data structures: take full advantage of built-in types, and understand the text vs bytes duality in the Unicode age Functions as

objects: view Python functions as first-class objects, and understand how this affects popular design patterns Object-oriented idioms: build classes by learning about references, mutability, interfaces, operator overloading, and multiple inheritance Control flow: leverage context managers, generators, coroutines, and concurrency with the concurrent.futures and asyncio packages Metaprogramming: understand how properties, attribute descriptors, class decorators, and metaclasses work

[ROMANCE](#) [ACTION & ADVENTURE](#) [MYSTERY & THRILLER](#) [BIOGRAPHIES & HISTORY](#) [CHILDREN'S](#) [YOUNG ADULT](#) [FANTASY](#)
[HISTORICAL FICTION](#) [HORROR](#) [LITERARY FICTION](#) [NON-FICTION](#) [SCIENCE FICTION](#)