

Learning Processing A Beginners Guide To Programming Images Animation And Interaction The Morgan Kaufmann Series In Computer Graphics

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Head First Python - Paul Barry 2016-11-21

Want to learn the Python language without slogging your way through how-to manuals? With *Head First Python*, you'll quickly grasp Python's fundamentals, working with the built-in data structures and functions. Then you'll move on to building your very own webapp, exploring database management, exception handling, and data wrangling. If you're intrigued by what you can do with context managers, decorators, comprehensions, and generators, it's all here. This second edition is a complete learning experience that will help you become a bonafide Python programmer in no time. Why does this book look so different? Based on the latest research in cognitive science and learning

theory, *Head First Python* uses a visually rich format to engage your mind, rather than a text-heavy approach that puts you to sleep. Why waste your time struggling with new concepts?

This multi-sensory learning experience is designed for the way your brain really works.

Programming Media Art Using Processing - Margaret Noble 2020-12-17

Programming Media Art Using Processing: A Beginner's Guide provides an entry-level exploration into visual design through computer programming using the open source and artist-friendly language, Processing. Used by hundreds of students, this learning system breaks lessons down into strategic steps towards fun and creative media art projects. This book provides a

linear series of lessons with step-by-step examples that lead to beginning media art projects, including abstract designs, pixel landscapes, rollover animations, and simple video games. Computer programming can be overwhelming for the first-time learner, but this book makes the learning of code more digestible and fun through a full color, well-diagrammed, and deeply explained text presentation. Lessons are rhythmically broken down into digestible parts with code annotations and illustrations that help learners focus on the details one step at a time. The content is legible, flexible, and fun to work with because of its project-based nature. By following the lessons and producing the projects sequentially in this book, readers will develop the beginning foundational skills needed to understand computer programming basics across many languages and also explore the art of graphic design. Ultimately, this is a hands-on, practical guide.

The Rust Programming Language (Covers

Rust 2018) - Steve Klabnik 2019-09-03

The official book on the Rust programming language, written by the Rust development team at the Mozilla Foundation, fully updated for Rust 2018. The Rust Programming Language is the official book on Rust: an open source systems programming language that helps you write faster, more reliable software. Rust offers control over low-level details (such as memory usage) in combination with high-level ergonomics, eliminating the hassle traditionally associated with low-level languages. The authors of The Rust Programming Language, members of the Rust Core Team, share their knowledge and experience to show you how to take full advantage of Rust's features--from installation to creating robust and scalable programs. You'll begin with basics like creating functions, choosing data types, and binding variables and then move on to more advanced concepts, such as:

- Ownership and borrowing, lifetimes, and traits
- Using Rust's memory safety guarantees

to build fast, safe programs • Testing, error handling, and effective refactoring • Generics, smart pointers, multithreading, trait objects, and advanced pattern matching • Using Cargo, Rust's built-in package manager, to build, test, and document your code and manage dependencies • How best to use Rust's advanced compiler with compiler-led programming techniques You'll find plenty of code examples throughout the book, as well as three chapters dedicated to building complete projects to test your learning: a number guessing game, a Rust implementation of a command line tool, and a multithreaded server. New to this edition: An extended section on Rust macros, an expanded chapter on modules, and appendixes on Rust development tools and editions.

The Rails Way - Obie Fernandez 2007-11-16

The expert guide to building Ruby on Rails applications Ruby on Rails strips complexity from the development process, enabling professional developers to focus on what matters

most: delivering business value. Now, for the first time, there's a comprehensive, authoritative guide to building production-quality software with Rails. Pioneering Rails developer Obie Fernandez and a team of experts illuminate the entire Rails API, along with the Ruby idioms, design approaches, libraries, and plug-ins that make Rails so valuable. Drawing on their unsurpassed experience, they address the real challenges development teams face, showing how to use Rails' tools and best practices to maximize productivity and build polished applications users will enjoy. Using detailed code examples, Obie systematically covers Rails' key capabilities and subsystems. He presents advanced programming techniques, introduces open source libraries that facilitate easy Rails adoption, and offers important insights into testing and production deployment. Dive deep into the Rails codebase together, discovering why Rails behaves as it does— and how to make it behave the way you want it to. This book will

help you Increase your productivity as a web developer Realize the overall joy of programming with Ruby on Rails Learn what's new in Rails 2.0 Drive design and protect long-term maintainability with TestUnit and RSpec Understand and manage complex program flow in Rails controllers Leverage Rails' support for designing REST-compliant APIs Master sophisticated Rails routing concepts and techniques Examine and troubleshoot Rails routing Make the most of ActiveRecord object-relational mapping Utilize Ajax within your Rails applications Incorporate logins and authentication into your application Extend Rails with the best third-party plug-ins and write your own Integrate email services into your applications with ActionMailer Choose the right Rails production configurations Streamline deployment with Capistrano

Programming Media Art Using Processing -

Margaret Noble 2020-12-16

Programming Media Art Using Processing: A

Beginner's Guide provides an entry-level exploration into visual design through computer programming using the open source and artist-friendly language, Processing. Used by hundreds of students, this learning system breaks lessons down into strategic steps towards fun and creative media art projects. This book provides a linear series of lessons with step-by-step examples that lead to beginning media art projects, including abstract designs, pixel landscapes, rollover animations, and simple video games. Computer programming can be overwhelming for the first-time learner, but this book makes the learning of code more digestible and fun through a full color, well-diagrammed, and deeply explained text presentation. Lessons are rhythmically broken down into digestible parts with code annotations and illustrations that help learners focus on the details one step at a time. The content is legible, flexible, and fun to work with because of its project-based nature. By following the lessons and producing the

projects sequentially in this book, readers will develop the beginning foundational skills needed to understand computer programming basics across many languages and also explore the art of graphic design. Ultimately, this is a hands-on, practical guide. To learn more about Margaret Noble's work, please visit her artist's website and educator website.

Natural Language Processing with Python -

Steven Bird 2009-06-12

This book offers a highly accessible introduction to natural language processing, the field that supports a variety of language technologies, from predictive text and email filtering to automatic summarization and translation. With it, you'll learn how to write Python programs that work with large collections of unstructured text. You'll access richly annotated datasets using a comprehensive range of linguistic data structures, and you'll understand the main algorithms for analyzing the content and structure of written communication. Packed with

examples and exercises, Natural Language Processing with Python will help you: Extract information from unstructured text, either to guess the topic or identify "named entities" Analyze linguistic structure in text, including parsing and semantic analysis Access popular linguistic databases, including WordNet and treebanks Integrate techniques drawn from fields as diverse as linguistics and artificial intelligence This book will help you gain practical skills in natural language processing using the Python programming language and the Natural Language Toolkit (NLTK) open source library. If you're interested in developing web applications, analyzing multilingual news sources, or documenting endangered languages -- or if you're simply curious to have a programmer's perspective on how human language works -- you'll find Natural Language Processing with Python both fascinating and immensely useful.

[The Official Raspberry Pi Beginner's Guide -](#)

2018-12-10

Learn Python 3 the Hard Way - Zed A. Shaw

2017-06-26

You Will Learn Python 3! Zed Shaw has perfected the world's best system for learning Python 3. Follow it and you will succeed—just like the millions of beginners Zed has taught to date! You bring the discipline, commitment, and persistence; the author supplies everything else. In *Learn Python 3 the Hard Way*, you'll learn Python by working through 52 brilliantly crafted exercises. Read them. Type their code precisely. (No copying and pasting!) Fix your mistakes. Watch the programs run. As you do, you'll learn how a computer works; what good programs look like; and how to read, write, and think about code. Zed then teaches you even more in 5+ hours of video where he shows you how to break, fix, and debug your code—live, as he's doing the exercises. Install a complete Python environment Organize and write code Fix and

break code Basic mathematics Variables Strings and text Interact with users Work with files Looping and logic Data structures using lists and dictionaries Program design Object-oriented programming Inheritance and composition Modules, classes, and objects Python packaging Automated testing Basic game development Basic web development It'll be hard at first. But soon, you'll just get it—and that will feel great! This course will reward you for every minute you put into it. Soon, you'll know one of the world's most powerful, popular programming languages. You'll be a Python programmer. This Book Is Perfect For Total beginners with zero programming experience Junior developers who know one or two languages Returning professionals who haven't written code in years Seasoned professionals looking for a fast, simple, crash course in Python 3

Processing - Ira Greenberg 2007-12-31

First Processing book on the market Processing is a nascent technology rapidly increasing in

popularity Links with the creators of Processing will help sell the book

A Beginners Guide to Python 3 Programming - John Hunt 2019-08-08

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.

Processing - Jeffrey L. Nyhoff 2017-05-19

This book demonstrates how Processing is an excellent language for beginners to learn the fundamentals of computer programming. Originally designed to make it simpler for digital artists to learn to program, Processing is a wonderful first language for anyone to learn. Given its origins, Processing enables a multimodal approach to programming instruction, well suited to students with interests in computer science or in the arts and humanities. The book uses Processing's capabilities for graphics and interactivity in order to create examples that are simple, illustrative, interesting, and fun. It is designed to appeal to a broad range of readers, including those who want to learn to program to create digital art, as well as those who seek to learn to program to process numerical information or data. It can be used by students and instructors

in a first course on programming, as well as by anyone eager to teach them self to program. Following a traditional sequence of topics for introducing programming, the book introduces key computer science concepts, without overwhelming readers with extensive detail. The conversational style and pace of the book are based upon the authors' extensive experience with teaching programming to a wide variety of beginners in a classroom. No prior programming experience is expected.

Processing, second edition - Casey Reas
2014-12-19

The new edition of an introduction to computer programming within the context of the visual arts, using the open-source programming language Processing; thoroughly updated throughout. The visual arts are rapidly changing as media moves into the web, mobile devices, and architecture. When designers and artists learn the basics of writing software, they develop a new form of literacy that enables them

to create new media for the present, and to imagine future media that are beyond the capacities of current software tools. This book introduces this new literacy by teaching computer programming within the context of the visual arts. It offers a comprehensive reference and text for Processing (www.processing.org), an open-source programming language that can be used by students, artists, designers, architects, researchers, and anyone who wants to program images, animation, and interactivity. Written by Processing's cofounders, the book offers a definitive reference for students and professionals. Tutorial chapters make up the bulk of the book; advanced professional projects from such domains as animation, performance, and installation are discussed in interviews with their creators. This second edition has been thoroughly updated. It is the first book to offer in-depth coverage of Processing 2.0 and 3.0, and all examples have been updated for the new syntax. Every chapter has been revised, and new

chapters introduce new ways to work with data and geometry. New “synthesis” chapters offer discussion and worked examples of such topics as sketching with code, modularity, and algorithms. New interviews have been added that cover a wider range of projects. “Extension” chapters are now offered online so they can be updated to keep pace with technological developments in such fields as computer vision and electronics. Interviews SUE.C, Larry Cuba, Mark Hansen, Lynn Hershman Leeson, Jürg Lehni, LettError, Golan Levin and Zachary Lieberman, Benjamin Maus, Manfred Mohr, Ash Nehru, Josh On, Bob Sabiston, Jennifer Steinkamp, Jared Tarbell, Steph Thirion, Robert Winter

A Beginner's Guide to Scala, Object Orientation and Functional Programming - John Hunt
2018-03-02

Scala is now an established programming language developed by Martin Oderskey and his team at the EPFL. The name Scala is derived

from Sca(lable) La(nguage). Scala is a multi-paradigm language, incorporating object oriented approaches with functional programming. Although some familiarity with standard computing concepts is assumed (such as the idea of compiling a program and executing this compiled from etc.) and with basic procedural language concepts (such as variables and allocation of values to these variables) the early chapters of the book do not assume any familiarity with object orientation nor with functional programming. These chapters also step through other concepts with which the reader may not be familiar (such as list processing). From this background, the book provides a practical introduction to both object and functional approaches using Scala. These concepts are introduced through practical experience taking the reader beyond the level of the language syntax to the philosophy and practice of object oriented development and functional programming. Students and those

actively involved in the software industry will find this comprehensive introduction to Scala invaluable.

Coding Art - Yu Zhang 2021-01-07

Finally, a book on creative programming, written directly for artists and designers! Rather than following a computer science curriculum, this book is aimed at creatives who are working in the intersection of design, art, and education. In this book you'll learn to apply computation into the creative process by following a four-step process, and through this, land in the cross section of coding and art, with a focus on practical examples and relevant work structures. You'll follow a real-world use case of computation art and see how it relates back to the four key pillars, and addresses potential pitfalls and challenges in the creative process. All code examples are presented in a fully integrated Processing example library, making it easy for readers to get started. This unique and finely balanced approach between skill

acquisition and the creative process and development makes *Coding Art* a functional reference book for both creative programming and the creative process for professors and students alike. What You'll Learn Review ideas and approaches from creative programming to different professional domains Work with computational tools like the Processing language Understand the skills needed to move from static elements to animation to interaction Use interactivity as input to bring creative concepts closer to refinement and depth Simplify and extend the design of aesthetics, rhythms, and smoothness with data structures Leverage the diversity of art code on other platforms like the web or mobile applications Understand the end-to-end process of computation art through real world use cases Study best practices, common pitfalls, and challenges of the creative process Who This Book Is For Those looking to see what computation and data can do for their creative expression; learners who want to integrate

computation and data into their practices in different perspectives; and those who already know how to program, seeking creativity and inspiration in the context of computation and data.

Coding Languages for Absolute Beginners -

Zach Webber 2018-12-07

The World is changing rapidly and technology is at the very center of it. Technology is affecting our present. Technology drives and shapes our future. What better way to be part of that driving force than to learn the beating heart of all these computers and application? Coding. The Coding Languages for Absolute Beginners series aims to be The go-to-guide for beginners to get started on programming and learn the coding skills you need to build the technology and drive the future you want. And the best part about it, you'll learn from scratch not just 1, 2, 3 but 6 Programming Languages! In this series, you'll learn the basics, techniques and best practices for the following coding languages:

Arduino C++ C# Powershell Python SQL This comprehensive beginners guide to these 6 Programming Languages gives you everything you need to know to get started on coding, and much much more! Before you know it, you'll start seeing results on screen and your on your way to mastering any, if not all, of these programming languages! Start your coding journey now!

Java for Absolute Beginners - Iuliana Cosmina 2018-12-05

Write your first code in Java using simple, step-by-step examples that model real-world objects and events, making learning easy. With this book you'll be able to pick up the concepts without fuss. Java for Absolute Beginners teaches Java development in language anyone can understand, giving you the best possible start. You'll see clear code descriptions and layout so that you can get your code running as soon as possible. After reading this book, you'll come away with the basics to get started writing

programs in Java. Author Iuliana Cosmina focuses on practical knowledge and getting up to speed quickly—all the bits and pieces a novice needs to get started programming in Java. First, you'll discover how Java is executed, what type of language it is, and what it is good for. With the theory out of the way, you'll install Java, choose an editor such as IntelliJ IDEA, and write your first simple Java program. Along the way you'll compile and execute this program so it can run on any platform that supports Java. As part of this tutorial you'll see how to write high-quality code by following conventions and respecting well-known programming principles, making your projects more professional and efficient. Finally, alongside the core features of Java, you'll learn skills in some of the newest and most exciting features of the language: Generics, Lambda expressions, modular organization, local-variable type inference, and local variable syntax for Lambda expressions. Java for Absolute Beginners gives you all you need to start your

Java 9+ programming journey. No experience necessary. What You'll Learn Use data types, operators, and the new stream API Install and use a build tool such as Gradle Build interactive Java applications with JavaFX Exchange data using the new JSON APIs Play with images using multi-resolution APIs Use the publish-subscribe framework Who This Book Is For Those who are new to programming and who want to start with Java.

Python and Sql Programming - Tony Coding
2020-02-11

What is Python Machine Learning for beginners? Don't miss a line... Read on your PC, Mac, smart phone, tablet or Kindle device. Includes 2 manuscripts Python machine learning for beginners Python is one of the sophisticated machine languages used to program a computer today. It can be used to code virtually all computer operations, which means it would likely suit what you have in mind too. It is used far and wide by standard computer and top tech

firms, which is one reason every brilliant programmer should learn and understand python machine programming. A unique feature of python machine is that it can easily be understood by humans, unlike most other computer languages. There is a wide range of functions you can perform with Python, and you would have access to them all and how to apply them like a pro in this e-book. Among others, this eBook will guide you from a beginner who has no idea what programming entails to a pro who can smartly code any computer operation. Neural network is one of the basics you need to understand, and you will definitely find a bit by bit overview of the neural networks, as well as the processes of the neural networks in here. Algorithms is another concept that you need to understand from top to bottom. The author realizes this, and so dedicates a whole chapter to carefully take you through the process of optimizing your machine learning system with algorithm. Apart from discovering series of

programmatic ways you can try, you would also get grips to deeper textual and social media data. The only part some experts do not understand is how to organize data using pre-processing techniques. You would certainly not have that problem as it is well analyzed in this e-book. sql coding for beginners Structured Query Language (SQL) is one of the foremost programming languages used to coordinate your data when saved in relational databases. A lot of firms appreciate sql due to the simplicity in its instructional coding. This feature is a top reason you might like to try sql too. Though, there are other features, and you would find the full function of the code in this e-book. Often times, users are weighed down and distracted from using sql by the fact that it is technical. It involves data, tables and column navigation. The author understands the fear of the learners here, and so, makes this one of the best informatory e-books. The e-book details a step by step explanation of how to correctly install SQL

developer as a novice, down to the methods with which you can work with data, tables and columns. There are different types of data and this e-book teaches the various methods through which one can differentiate them. Also, how you can ensure integrity of your data. You need to learn how to create database in order to conveniently navigate with SQL, and there is a different chapter for that in this e-book, alongside how to proper administration of your database.

Security, SQL injections, pivoting data in SQL and such relevant items are clearly explained in this book. This is why paying close attention to all items in this book is enough to make you a top sql coder. Download your copy today

Learn C Programming - Jeff Szuhay

2020-06-26

Get started with writing simple programs in C while learning the skills that will help you work with practically any programming language Key Features Learn essential C concepts such as variables, data structures, functions, loops, and

pointers Get to grips with the core programming aspects that form the base of many modern programming languages Explore the expressiveness and versatility of the C language with the help of sample programs Book Description C is a powerful general-purpose programming language that is excellent for beginners to learn. This book will introduce you to computer programming and software development using C. If you're an experienced developer, this book will help you to become familiar with the C programming language. This C programming book takes you through basic programming concepts and shows you how to implement them in C. Throughout the book, you'll create and run programs that make use of one or more C concepts, such as program structure with functions, data types, and conditional statements. You'll also see how to use looping and iteration, arrays, pointers, and strings. As you make progress, you'll cover code documentation, testing and validation methods,

basic input/output, and how to write complete programs in C. By the end of the book, you'll have developed basic programming skills in C, that you can apply to other programming languages and will develop a solid foundation for you to advance as a programmer. What you will learn

Understand fundamental programming concepts and implement them in C

Write working programs with an emphasis on code indentation and readability

Break existing programs intentionally and learn how to debug code

Adopt good coding practices and develop a clean coding style

Explore general programming concepts that are applicable to more advanced projects

Discover how you can use building blocks to make more complex and interesting programs

Use C Standard Library functions and understand why doing this is desirable

Who this book is for

This book is written for two very diverse audiences. If you're an absolute beginner who only has basic familiarity with operating a computer, this book will help you learn the most

fundamental concepts and practices you need to know to become a successful C programmer. If you're an experienced programmer, you'll find the full range of C syntax as well as common C idioms. You can skim through the explanations and focus primarily on the source code provided.

Machine Learning For Dummies - John Paul Mueller 2021-02-09

One of Mark Cuban's top reads for better understanding A.I. (inc.com, 2021)

Your comprehensive entry-level guide to machine learning

While machine learning expertise doesn't quite mean you can create your own Turing Test-proof android—as in the movie *Ex Machina*—it is a form of artificial intelligence and one of the most exciting technological means of identifying opportunities and solving problems fast and on a large scale. Anyone who masters the principles of machine learning is mastering a big part of our tech future and opening up incredible new directions in careers that include fraud detection, optimizing search

results, serving real-time ads, credit-scoring, building accurate and sophisticated pricing models—and way, way more. Unlike most machine learning books, the fully updated 2nd Edition of *Machine Learning For Dummies* doesn't assume you have years of experience using programming languages such as Python (R source is also included in a downloadable form with comments and explanations), but lets you in on the ground floor, covering the entry-level materials that will get you up and running building models you need to perform practical tasks. It takes a look at the underlying—and fascinating—math principles that power machine learning but also shows that you don't need to be a math whiz to build fun new tools and apply them to your work and study. Understand the history of AI and machine learning Work with Python 3.8 and TensorFlow 2.x (and R as a download) Build and test your own models Use the latest datasets, rather than the worn out data found in other books Apply machine

learning to real problems Whether you want to learn for college or to enhance your business or career performance, this friendly beginner's guide is your best introduction to machine learning, allowing you to become quickly confident using this amazing and fast-developing technology that's impacting lives for the better all over the world.

Absolute Beginner's Guide to C - Greg Perry
1994-04-08

For beginning programmers, this updated edition answers all C programming questions. This bestseller talks to readers at their level, explaining every aspect of how to get started and learn the C language quickly. Readers also find out where to learn more about C. This book includes tear-out reference card of C functions and statements, a hierarchy chart, and other valuable information. It uses special icons, notes, clues, warnings, and rewards to make understanding easier. And the clear and friendly style presumes no programming knowledge.

An Introduction to Statistical Learning - Gareth James 2013-06-24

An Introduction to Statistical Learning provides an accessible overview of the field of statistical learning, an essential toolset for making sense of the vast and complex data sets that have emerged in fields ranging from biology to finance to marketing to astrophysics in the past twenty years. This book presents some of the most important modeling and prediction techniques, along with relevant applications. Topics include linear regression, classification, resampling methods, shrinkage approaches, tree-based methods, support vector machines, clustering, and more. Color graphics and real-world examples are used to illustrate the methods presented. Since the goal of this textbook is to facilitate the use of these statistical learning techniques by practitioners in science, industry, and other fields, each chapter contains a tutorial on implementing the analyses and methods presented in R, an extremely

popular open source statistical software platform. Two of the authors co-wrote *The Elements of Statistical Learning* (Hastie, Tibshirani and Friedman, 2nd edition 2009), a popular reference book for statistics and machine learning researchers. *An Introduction to Statistical Learning* covers many of the same topics, but at a level accessible to a much broader audience. This book is targeted at statisticians and non-statisticians alike who wish to use cutting-edge statistical learning techniques to analyze their data. The text assumes only a previous course in linear regression and no knowledge of matrix algebra.

Getting Started with Processing.py - Allison Parrish 2016-05-11

Processing opened up the world of programming to artists, designers, educators, and beginners. The Processing.py Python implementation of Processing reinterprets it for today's web. This short book gently introduces the core concepts of computer programming and working with

Processing. Written by the co-founders of the Processing project, Reas and Fry, along with co-author Allison Parrish, Getting Started with Processing.py is your fast track to using Python's Processing mode.

Fundamentals of Computer Programming with C# - Svetlin Nakov 2013-09-01

The free book "Fundamentals of Computer Programming with C#" is a comprehensive computer programming tutorial that teaches programming, logical thinking, data structures and algorithms, problem solving and high quality code with lots of examples in C#. It starts with the first steps in programming and software development like variables, data types, conditional statements, loops and arrays and continues with other basic topics like methods, numeral systems, strings and string processing, exceptions, classes and objects. After the basics this fundamental programming book enters into more advanced programming topics like recursion, data structures (lists, trees, hash-

tables and graphs), high-quality code, unit testing and refactoring, object-oriented principles (inheritance, abstraction, encapsulation and polymorphism) and their implementation the C# language. It also covers fundamental topics that each good developer should know like algorithm design, complexity of algorithms and problem solving. The book uses C# language and Visual Studio to illustrate the programming concepts and explains some C# / .NET specific technologies like lambda expressions, extension methods and LINQ. The book is written by a team of developers lead by Svetlin Nakov who has 20+ years practical software development experience. It teaches the major programming concepts and way of thinking needed to become a good software engineer and the C# language in the meantime. It is a great start for anyone who wants to become a skillful software engineer. The books does not teach technologies like databases, mobile and web development, but shows the true

way to master the basics of programming regardless of the languages, technologies and tools. It is good for beginners and intermediate developers who want to put a solid base for a successful career in the software engineering industry. The book is accompanied by free video lessons, presentation slides and mind maps, as well as hundreds of exercises and live examples. Download the free C# programming book, videos, presentations and other resources from <http://introprogramming.info>. Title: Fundamentals of Computer Programming with C# (The Bulgarian C# Programming Book) ISBN: 9789544007737 ISBN-13: 978-954-400-773-7 (9789544007737) ISBN-10: 954-400-773-3 (9544007733) Author: Svetlin Nakov & Co. Pages: 1132 Language: English Published: Sofia, 2013 Publisher: Faber Publishing, Bulgaria Web site: <http://www.introprogramming.info> License: CC-Attribution-Share-Alike Tags: free, programming, book, computer programming,

programming fundamentals, ebook, book programming, C#, CSharp, C# book, tutorial, C# tutorial; programming concepts, programming fundamentals, compiler, Visual Studio, .NET, .NET Framework, data types, variables, expressions, statements, console, conditional statements, control-flow logic, loops, arrays, numeral systems, methods, strings, text processing, StringBuilder, exceptions, exception handling, stack trace, streams, files, text files, linear data structures, list, linked list, stack, queue, tree, balanced tree, graph, depth-first search, DFS, breadth-first search, BFS, dictionaries, hash tables, associative arrays, sets, algorithms, sorting algorithm, searching algorithms, recursion, combinatorial algorithms, algorithm complexity, OOP, object-oriented programming, classes, objects, constructors, fields, properties, static members, abstraction, interfaces, encapsulation, inheritance, virtual methods, polymorphism, cohesion, coupling, enumerations, generics, namespaces, UML,

design patterns, extension methods, anonymous types, lambda expressions, LINQ, code quality, high-quality code, high-quality classes, high-quality methods, code formatting, self-documenting code, code refactoring, problem solving, problem solving methodology, 9789544007737, 9544007733

Head First Learn to Code - Eric Freeman
2018-01-02

What will you learn from this book? It's no secret the world around you is becoming more connected, more configurable, more programmable, more computational. You can remain a passive participant, or you can learn to code. With Head First Learn to Code you'll learn how to think computationally and how to write code to make your computer, mobile device, or anything with a CPU do things for you. Using the Python programming language, you'll learn step by step the core concepts of programming as well as many fundamental topics from computer science, such as data structures, storage,

abstraction, recursion, and modularity. Why does this book look so different? Based on the latest research in cognitive science and learning theory, Head First Learn to Code uses a visually rich format to engage your mind, rather than a text-heavy approach that puts you to sleep. Why waste your time struggling with new concepts?

This multi-sensory learning experience is designed for the way your brain really works.

Deep Learning for Coders with fastai and PyTorch - Jeremy Howard 2020-06-29

Deep learning is often viewed as the exclusive domain of math PhDs and big tech companies. But as this hands-on guide demonstrates, programmers comfortable with Python can achieve impressive results in deep learning with little math background, small amounts of data, and minimal code. How? With fastai, the first library to provide a consistent interface to the most frequently used deep learning applications. Authors Jeremy Howard and Sylvain Gugger, the creators of fastai, show you how to train a model

on a wide range of tasks using fastai and PyTorch. You'll also dive progressively further into deep learning theory to gain a complete understanding of the algorithms behind the scenes. Train models in computer vision, natural language processing, tabular data, and collaborative filtering Learn the latest deep learning techniques that matter most in practice Improve accuracy, speed, and reliability by understanding how deep learning models work Discover how to turn your models into web applications Implement deep learning algorithms from scratch Consider the ethical implications of your work Gain insight from the foreword by PyTorch cofounder, Soumith Chintala

Beginner's Guide to Kotlin Programming - John Hunt 2021

Kotlin is an exciting new language that runs on Windows, macOS and Linux operating systems. It has also been adopted by Google as their preferred language for Android development.

This textbook assumes very little knowledge of programming so whether you have dabbled with a little JavaScript, played with a bit of Python, written Java or have virtually no programming experience at all you will find that it is for you. The first part of the book introduces Kotlin program structures as well as conditional flow of control features such as if and when expressions as well as iteration loops such as for, while and do-while. Subsequent chapters explain how functions are implemented in Kotlin and introduce concepts from functional programming such as higher order functions and curried functions. The second part focusses on object oriented programming techniques, these include classes, inheritance, abstraction and interfaces. The third part presents container data types such as Arrays, and collections including Lists, Sets and Maps and the fourth part considers concurrency and parallelism using Kotlin coroutines. The book concludes with an introduction to Android mobile application

development using Kotlin. Clear steps are provided explaining how to set up your environment and get started writing your own Kotlin programs. An important aspect of the book is teaching by example and there are many examples presented throughout the chapters. These examples are supported by a public GitHub repository that provides complete working code as well as sample solutions to the chapter exercises. This helps illustrate how to write well structured, clear, idiomatic Kotlin to build real applications.

Generative Design - Benedikt Gross 2018-11-13
Generative design, once known only to insiders as a revolutionary method of creating artwork, models, and animations with programmed algorithms, has in recent years become a popular tool for designers. By using simple languages such as JavaScript in p5.js, artists and makers can create everything from interactive typography and textiles to 3D-printed furniture to complex and elegant infographics. This

updated volume gives a jump-start on coding strategies, with step-by-step tutorials for creating visual experiments that explore the possibilities of color, form, typography, and images. Generative Design includes a gallery of all-new artwork from a range of international designers—fine art projects as well as commercial ones for Nike, Monotype, Dolby Laboratories, the musician Bjork, and others.
C Programming Language for Beginners - Will Norton 2020-04-11

Are you a beginner trying to learn C programming language? Are you looking forward to learning programming easily? Are you interested in creating real world programming projects with C? Read On... Are you an experienced programmer trying to learn C? The truth is: C is a famous programming language that is often misunderstood as a hard language to learn for beginners. A lot of books in the market that teach C are for experienced programmers and don't serve a good purpose for

beginners who are just now starting to learn. However, with correct guides and resources you can understand the basic and complex C concepts within a very less time frame. programming. C programming language needs to be learned with great precision and accuracy. There are a lot of system functions that need to be learned with examples to understand the power of C programming language. We, as authors, are experienced Programmers trying to share our knowledge with beginners who are not equipped with experts guidance about C programming language. We are proud to say that for all the questions above the solution is this all new introduction to C programming language book. This is concise, simple and effective and serves its purpose. DOWNLOAD: C programming language for beginners, A step by step guide to learn C programming language & series This book is a comprehensive introduction to a lot of C programming language concepts that are often difficult to understand. This book

can also be a reference guide for programmers who are developing projects. The goal of this book is simple: We want beginners to not get afraid of the complexities that C comes with. We want to help beginners who are willing to do hard work to learn programming with this book. This book will serve as a guide for beginners and a reference for experienced programmers. This is the best C programming language that is available online. You will also learn: ● Why is C important? ● What is C language? ● Different versions available in C ● How to install C? ● What is a program? ● What is a programming process? ● How to create your first C program? ● What is functional programming? ● What are different available operations in C? ● What are variables? ● What are constants? ● What are string manipulations? ● What are time functions? ● A brief section about Arrays and Structures ● Description about different errors And a lot more... This book is a complete Layman's introduction to C programming

language and its features with complete use case examples that will clear all your doubts related to the syntax structures that are involved with C. Would you like to know more? Are you excited to learn in detail about more of these basic and moderate concepts in C programming language? This book is all yours. Scroll to the top of the page and select the buy now button

Python for Beginners - Jason Test 2020-10-27

Are you looking for a super-fast computer programming course? Would you like to learn the Python Programming Language like a pro in 7 days? Do you want to increase your online business thanks to the web applications? If so, keep reading: this bundle book is for you! Finally on launch the most complete Python guide for beginners: Python will introduce you many selected practices for coding . You will discover as a beginner the world of data science, machine learning and artificial intelligence. I'd like to say that Machine Learning with Python can be complicated, and the whole concept of Data

Analysis can be daunting to starters. You have to take time and study the whole concept before you start to be proficiency. But this book will be your guide: the following list is just a tiny fraction of what you will learn in Python for beginners. □ The basics of Python programming □ Differences among programming languages □ Vba, SQL, R, Python □ Game creation with Python □ Easy-to-follow steps for reading and writing codes. □ Control flow statements and Error handling □ 3 best strategies with NumPy, Pandas, Matplotlib □ 3 reasons why Python is fundamental for Data Science □ 5 Most important Machine Learning Algorithms Even if you have never written a programming code before, you will quickly grasp the basics thanks to visual charts and guidelines for coding. Examples and step-by-step guides will guide you during the code-writing learning process. The description of each topic is crystal-clear and you can easily practice with related exercises and Predictive modelling concepts are explained in

simple terms You will also learn 3 best tricks of writing codes. If you really wish to to learn Python and master its language, please click the BUY NOW button.

Getting Started with p5.js - Lauren McCarthy
2015-10-12

With p5.js, you can think of your entire Web browser as your canvas for sketching with code! Learn programming the fun way--by sketching with interactive computer graphics! *Getting Started with p5.js* contains techniques that can be applied to creating games, animations, and interfaces. p5.js is a new interpretation of Processing written in JavaScript that makes it easy to interact with HTML5 objects, including text, input, video, webcam, and sound. Like its older sibling Processing, p5.js makes coding accessible for artists, designers, educators, and beginners. Written by the lead p5.js developer and the founders of Processing, this book provides an introduction to the creative possibilities of today's Web, using JavaScript and

HTML. With *Getting Started with p5.js*, you'll:
Quickly learn programming basics, from variables to objects
Understand the fundamentals of computer graphics
Create interactive graphics with easy-to-follow projects
Learn to apply data visualization techniques
Capture and manipulate webcam audio and video feeds in the browser

The SparkFun Guide to Processing - Derek Runberg
2015-08-01

Processing is a free, beginner-friendly programming language designed to help non-programmers create interactive art with code. *The SparkFun Guide to Processing*, the first in the SparkFun Electronics series, will show you how to craft digital artwork and even combine that artwork with hardware so that it reacts to the world around you. Start with the basics of programming and animation as you draw colorful shapes and make them bounce around the screen. Then move on to a series of hands-on, step-by-step projects that will show you how

to: -Make detailed pixel art and scale it to epic proportions -Write a maze game and build a MaKey MaKey controller with fruit buttons -Play, record, and sample audio to create your own soundboard -Fetch weather data from the Web and build a custom weather dashboard -Create visualizations that change based on sound, light, and temperature readings With a little imagination and Processing as your paintbrush, you'll be on your way to coding your own gallery of digital art in no time! Put on your artist's hat, and begin your DIY journey by learning some basic programming and making your first masterpiece with The SparkFun Guide to Processing. The code in this book is compatible with Processing 2 and Processing 3.

R for Data Science - Hadley Wickham
2016-12-12

Learn how to use R to turn raw data into insight, knowledge, and understanding. This book introduces you to R, RStudio, and the tidyverse, a collection of R packages designed to work

together to make data science fast, fluent, and fun. Suitable for readers with no previous programming experience, R for Data Science is designed to get you doing data science as quickly as possible. Authors Hadley Wickham and Garrett Grolemund guide you through the steps of importing, wrangling, exploring, and modeling your data and communicating the results. You'll get a complete, big-picture understanding of the data science cycle, along with basic tools you need to manage the details. Each section of the book is paired with exercises to help you practice what you've learned along the way. You'll learn how to:

Wrangle—transform your datasets into a form convenient for analysis
Program—learn powerful R tools for solving data problems with greater clarity and ease
Explore—examine your data, generate hypotheses, and quickly test them
Model—provide a low-dimensional summary that captures true "signals" in your dataset
Communicate—learn R Markdown for

integrating prose, code, and results

The First 20 Hours - Josh Kaufman 2013-06-13

Forget the 10,000 hour rule— what if it's possible to learn the basics of any new skill in 20 hours or less? Take a moment to consider how many things you want to learn to do. What's on your list? What's holding you back from getting started? Are you worried about the time and effort it takes to acquire new skills—time you don't have and effort you can't spare? Research suggests it takes 10,000 hours to develop a new skill. In this nonstop world when will you ever find that much time and energy? To make matters worse, the early hours of practicing something new are always the most frustrating. That's why it's difficult to learn how to speak a new language, play an instrument, hit a golf ball, or shoot great photos. It's so much easier to watch TV or surf the web . . . In *The First 20 Hours*, Josh Kaufman offers a systematic approach to rapid skill acquisition— how to learn any new skill as quickly as possible. His method

shows you how to deconstruct complex skills, maximize productive practice, and remove common learning barriers. By completing just 20 hours of focused, deliberate practice you'll go from knowing absolutely nothing to performing noticeably well. Kaufman personally field-tested the methods in this book. You'll have a front row seat as he develops a personal yoga practice, writes his own web-based computer programs, teaches himself to touch type on a nonstandard keyboard, explores the oldest and most complex board game in history, picks up the ukulele, and learns how to windsurf. Here are a few of the simple techniques he teaches: Define your target performance level: Figure out what your desired level of skill looks like, what you're trying to achieve, and what you'll be able to do when you're done. The more specific, the better. Deconstruct the skill: Most of the things we think of as skills are actually bundles of smaller subskills. If you break down the subcomponents, it's easier to figure out which ones are most

important and practice those first. Eliminate barriers to practice: Removing common distractions and unnecessary effort makes it much easier to sit down and focus on deliberate practice. Create fast feedback loops: Getting accurate, real-time information about how well you're performing during practice makes it much easier to improve. Whether you want to paint a portrait, launch a start-up, fly an airplane, or juggle flaming chainsaws, The First 20 Hours will help you pick up the basics of any skill in record time . . . and have more fun along the way.

Python Programming - Dylan Penny
2021-01-22

Expand your computer and IT skills and earn more money by learning the world's most popular programming language - Python! Become even more computer savvy and rise above the competition when applying to jobs with proficient Python programming skills. Python programming provides you with a

sustainable foundation in computer programming that is easy to build upon and specialize your skills. This results in becoming a better candidate for job openings and increasing your salary! With this guide in your hands, you will: Learn the Python programming language from scratch with little to no experience required Specialize in a computer language and make yourself more valuable to a company Open the door to new job opportunities after learning and implementing Python Study 3 complete books in one to build on your skills Become more desirable when applying for jobs, especially in the startup community Plus Much More! Right now Python is one of the most popular and useful languages programmers should know. With absolutely no experience required, you could learn the foundations of this language and easily build on your skills to increase your income and open the door to incredible job opportunities. Are you ready to make more money and learn an essential programming

language from scratch? ...Then Order Your Complete Guide and Start Learning Today!

Learning Processing - Daniel Shiffman 2015

This book teaches you the basic building blocks of programming needed to create cutting-edge graphics applications including interactive art, live video processing, and data visualization. A unique lab-style manual, the book gives graphic and web designers, artists, and illustrators of all stripes a jumpstart on working with the Processing programming environment by providing instruction on the basic principles of the language, followed by careful explanations of select advanced techniques. Within these pages, ITP (Tisch School of the Arts, New York University) professor Daniel Shiffman demonstrates the fundamentals of programming that will expand your understanding of what is possible in the world of computer graphics. By travelling beyond the confines of proprietary software, you will be empowered to create your own custom design tools. * A friendly start-up

guide to Processing, the free, open-source alternative to expensive software and daunting programming languages for the visual artist * No previous experience required-this book is for the true programming beginner! * Step-by-step examples, thorough explanations, hands-on exercises, and simple code samples support your learning curve. Source code and supplemental tutorials are also available through an online companion site

[The C Programming Language](#) - Brian W. Kernighan 1988

Introduces the features of the C programming language, discusses data types, variables, operators, control flow, functions, pointers, arrays, and structures, and looks at the UNIX system interface

A Complete Guide to Programming in C++ - Ulla Kirch-Prinz 2002

This guide was written for readers interested in learning the C++ programming language from scratch, and for both novice and advanced C++

programmers wishing to enhance their knowledge of C++. The text is organized to guide the reader from elementary language concepts to professional software development, with in depth coverage of all the C++ language elements en route.

Learning Processing - Daniel Shiffman

2015-09-09

Learning Processing, Second Edition, is a friendly start-up guide to Processing, a free, open-source alternative to expensive software and daunting programming languages. Requiring no previous experience, this book is for the true programming beginner. It teaches the basic building blocks of programming needed to create cutting-edge graphics applications including interactive art, live video processing, and data visualization. Step-by-step examples, thorough explanations, hands-on exercises, and sample code, supports your learning curve. A unique lab-style manual, the book gives graphic and web designers, artists,

and illustrators of all stripes a jumpstart on working with the Processing programming environment by providing instruction on the basic principles of the language, followed by careful explanations of select advanced techniques. The book has been developed with a supportive learning experience at its core. From algorithms and data mining to rendering and debugging, it teaches object-oriented programming from the ground up within the fascinating context of interactive visual media. This book is ideal for graphic designers and visual artists without programming background who want to learn programming. It will also appeal to students taking college and graduate courses in interactive media or visual computing, and for self-study. A friendly start-up guide to Processing, a free, open-source alternative to expensive software and daunting programming languages No previous experience required—this book is for the true programming beginner! Step-by-step examples, thorough

explanations, hands-on exercises, and sample code supports your learning curve

The Nature of Code - Daniel Shiffman 2012

How can we capture the unpredictable evolutionary and emergent properties of nature in software? How can understanding the mathematical principles behind our physical world help us to create digital worlds? This book focuses on a range of programming strategies and techniques behind computer simulations of natural systems, from elementary concepts in mathematics and physics to more advanced algorithms that enable sophisticated visual results. Readers will progress from building a basic physics engine to creating intelligent moving objects and complex systems, setting the foundation for further experiments in generative design. Subjects covered include forces, trigonometry, fractals, cellular automata, self-organization, and genetic algorithms. The book's examples are written in Processing, an open-source language and development environment

built on top of the Java programming language. On the book's website (<http://www.natureofcode.com>), the examples run in the browser via Processing's JavaScript mode.

Processing - Ira Greenberg 2013-05-13

Processing: Creative Coding and Generative Art in Processing 2 is a fun and creative approach to learning programming. Using the easy to learn Processing programming language, you will quickly learn how to draw with code, and from there move to animating in 2D and 3D. These basics will then open up a whole world of graphics and computer entertainment. If you've been curious about coding, but the thought of it also makes you nervous, this book is for you; if you consider yourself a creative person, maybe worried programming is too non-creative, this book is also for you; if you want to learn about the latest Processing 2.0 language release and also start making beautiful code art, this book is also definitely for you. You will learn how to develop interactive simulations, create beautiful

visualizations, and even code image-manipulation applications. All this is taught using hands-on creative coding projects. Processing 2.0 is the latest release of the open-source Processing language, and includes exciting new features, such as OpenGL 2 support for enhanced 3D graphics performance. Processing: Creative Coding and Generative Art in Processing 2 is designed for independent learning and also as a primary text for an

introductory computing class. Based on research funded by the National Science Foundation, this book brings together some of the most engaging and successful approaches from the digital arts and computer science classrooms. Teaches you how to program using a fun and creative approach. Covers the latest release of the Processing 2.0 language. Presents a research based approach to learning computing.