Ruby 2nd Edition Beginners Crash Course Ruby For Beginners Guide To Ruby Programming Ruby On Rails Rails Programming Data Structures Data Science Computer Science Computer Book 1

Annotation Everyone in the Ruby world seems to be talking about metaprogramming--how you can use it to remove duplication in your code and write elegant, beautiful programs. Now you can get in on the action as well. This book describes metaprogramming as an essential component of Ruby. Once you understand the principles of Ruby, including the object model, scopes, and eigenclasses, you're on your way to applying metaprogramming both in your daily work and in your fun, after-hours projects. Learning metaprogramming doesn't have to be difficult or boring. By taking you on a Monday-through-Friday workweek adventure with a pair of programmers, Paolo Perrotta helps make mastering the art of metaprogramming both straightforward and entertaining. The book is packed with: Pragmatic examples of metaprogramming in action, many of which come straight from popular libraries or frameworks, such as Rails. Programming challenges that let you experiment and play with some of the most fun, "out-there" metaprogramming concepts. Metaprogramming "spells"--34 practical recipes and idioms that you can study and apply right now, to write code that is sure to impress. Whether you're a Ruby apprentice on the path to mastering the language or a Ruby wiz in search of new tips, this book is for you.

The tale begins over three-hundred years ago, when the Fair People—the goblins, fairies, dragons, and other fabled and fantastic creatures of a dozen lands—fled the Old World for the New, seeking haven from the ways of Man. With them came their precious jewels: diamonds, rubies, emeralds, pearls... But then the Fair People vanished, taking with them their twelve fabulous treasures. And they remained hidden until now... Across North America, these twelve treasures, over ten-thousand dollars in precious jewels in 1982 dollars, are buried. The key to finding each can be found within the twelve full-color paintings and verses of THE SECRET. Are you smart enough? THE SECRET: A TREASURE HUNT was published in 1982. The year before publication, the author and publisher Byron Preiss had traveled to 12 locations in the continental U.S. (and possibly Canada) to secretly bury a dozen ceramic casques. Each casque contained a small key that could be redeemed for one of 12 jewels Preiss kept in a safe deposit box in New York. The key to finding the casques was to match one of 12 paintings to one of 12 poetic verses, solve the resulting riddle, and start digging. Since 1982, only two of the 12 casques have been recovered. The first was located in Grant Park, Chicago, in 1984 by a group of students. The second was unearthed in 2004 in Cleveland by two members of the Quest4Treasure forum.

Essential skills made easy! Written by Herb Schildt, the world's leading programming author, this step-by-step book is ideal for first-time programmers or those new to C++. The modular approach of this series, including sample projects and progress checks, makes it easy to learn to use C++ at your own pace.

Ruby Beginner's Crash CourseRuby for Beginner's Guide to Ruby Programming, Ruby on Rails & Rails ProgrammingCreatespace Independent Publishing Platform

A multi-user game, web site, cloud application, or networked database can have thousands of users all interacting at the same time. You need a powerful, industrial-strength tool to handle the really hard problems inherent in parallel, concurrent environments. You need Erlang. In this second edition of the bestselling Programming Erlang, you'll learn how to write parallel programs that scale effortlessly on multicore systems. Using Erlang, you'll be surprised at how easy it becomes to deal with parallel problems, and how much faster and more efficiently your programs run. That's because Erlang uses sets of parallel processes-not a single sequential process, as found in most programming languages. Joe Armstrong, creator of Erlang, introduces this powerful language in small steps, giving you a complete overview of Erlang and how to use it in common scenarios. You'll start with sequential programming, move to parallel programming and handling errors in parallel programs, and learn to work confidently with distributed programming and the standard Erlang/Open Telecom Platform (OTP) frameworks. You need no previous knowledge of functional or parallel programming. The chapters are packed with hands-on, real-world tutorial examples and insider tips and advice, and finish with exercises for both beginning and advanced users. The second edition has been extensively rewritten. New to this edition are seven chapters covering the latest Erlang features: maps, the type system and the Dialyzer, WebSockets, programming idioms, and a new stand-alone execution environment. You'll write programs that dynamically detect and correct errors, and that can be upgraded without stopping the system. There's also coverage of rebar (the de facto Erlang build system), and information on how to share and use Erlang projects on github, illustrated with examples from cowboy and bitcask. Erlang will change your view of the world, and of how you program. What You Need The Erlang/OTP system. Download it from erlang.org.

The Rails™ 3 Way is a comprehensive resource that digs into the new features in Rails 3 and perhaps more importantly, the rationale behind them. —Yehuda Katz, Rails Core The Bible for Ruby on Rails Application Development Ruby on Rails strips complexity from the development process, enabling professional developers to focus on what matters most: delivering business value via clean and maintainable code. The Rails™ 3 Way is the only comprehensive, authoritative guide to delivering production-quality code with Rails 3. Pioneering Rails expert Obie Fernandez and a team of leading experts illuminate the entire Rails 3 API, along with the idioms, design approaches, and libraries that make developing

applications with Rails so powerful. Drawing on their unsurpassed experience and track record, they address the real challenges development teams face, showing how to use Rails 3 to maximize your productivity. Using numerous detailed code examples, the author systematically covers Rails 3 key capabilities and subsystems, making this book a reference that you will turn to again and again. He presents advanced Rails programming techniques that have been proven effective in day-to-day usage on dozens of production Rails systems and offers important insights into behavior-driven development and production considerations such as scalability. Dive deep into the Rails 3 codebase and discover why Rails is designed the way it is—and how to make it do what you want it to do. This book will help you Learn what's new in Rails 3 Increase your productivity as a web application developer Realize the overall joy in programming with Rails Leverage Rails' powerful capabilities for building REST-compliant APIs Drive implementation and protect long-term maintainability using RSpec Design and manipulate your domain layer using Active Record Understand and program complex program flows using Action Controller Master sophisticated URL routing concepts Use Ajax techniques via Rails 3 support for unobtrusive JavaScript Learn to extend Rails with popular gems and plugins, and how to write your own Extend Rails with the best third-party plug-ins and write your own Integrate email services into your applications with Action Mailer Improve application responsiveness with background processing Create your own non-Active Record domain classes using Active Model Master Rails' utility classes and extensions in Active Support
For weeks, months—nay!—from the very moment you were born, you've felt it calling to you. At long last you'll be united with the programming language you've been longing for: Clojure! As a Lisp-style functional programming language, Clojure lets you write robust and elegant code, and because it runs on the Java Virtual Machine, you can take advantage of the vast Java ecosystem. Clojure for the Brave and True offers a "dessert-first" approach: you'll start playing with real programs immediately, as you steadily acclimate to the abstract but powerful features of Lisp and functional programming. Inside you'll find an offbeat, practical guide to Clojure, filled with quirky sample programs that catch cheese thieves and track glittery vampires. Learn how to: –Wield Clojure's core functions –Use Emacs for Clojure development –Write macros to modify Clojure itself –Use Clojure's tools to simplify concurrency and parallel programming Clojure for the Brave and True assumes no prior experience with Clojure, the Java Virtual Machine, or functional programming. Are you ready, brave reader, to meet your true destiny? Grab your best pair of parentheses—you're about to embark on an epic journey into the world of Clojure!
"An under-the-hood look at how the Ruby programming language runs code. Extensively illustrated with complete explanations and hands-on experiments. Covers Ruby 2.x"--
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!

Rails: Novice to Ninja is an easy-to-follow, practical and fun guide to Ruby on Rails for beginners. It covers all you need to get up and running, from installing Ruby, Rails and SQLite to building and deploying a fully-featured web application. The third edition of this book has been fully updated to cover Rails 5, the latest version of the framework. Unlike other Rails books, this book doesn't assume that you are an experienced web developer, or that you've used Ruby before. An entire chapter is devoted to learning Ruby in a fun way, using the interactive Ruby console, so you can follow along at home. You'll be an accomplished Ruby programmer in no time! You'll then start using Rails to build a practical, working project: a Reddit-like social news application. As you'll build the app, you'll gain valuable experience of using Rails features such as user authentication, session cookies, and automated testing. The book finishes with chapters on debugging, benchmarking and deployment to a live web server.

"We finally have the definitive treatise on PyTorch! It covers the basics and abstractions in great detail. I hope this book becomes your extended reference document." —Soumith Chintala, co-creator of PyTorch Key Features Written by PyTorch's creator and key contributors Develop deep learning models in a familiar Pythonic way Use PyTorch to build an image classifier for cancer detection Diagnose problems with your neural network and improve training with data augmentation Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About The Book Every other day we hear about new ways to put deep learning to good use: improved medical imaging, accurate credit card fraud detection, long range weather forecasting, and more. PyTorch puts these superpowers in your hands. Instantly familiar to anyone who knows Python data tools like NumPy and Scikit-learn, PyTorch simplifies deep learning without sacrificing advanced features. It's great for building quick models, and it scales smoothly from laptop to enterprise. Deep Learning with PyTorch teaches you to create deep learning and neural network systems with PyTorch. This practical book gets you to work right away building a tumor image classifier from scratch. After covering the basics, you'll learn best practices for the entire deep learning pipeline,

tackling advanced projects as your PyTorch skills become more sophisticated. All code samples are easy to explore in downloadable Jupyter notebooks. What You Will Learn Understanding deep learning data structures such as tensors and neural networks Best practices for the PyTorch Tensor API, loading data in Python, and visualizing results Implementing modules and loss functions Utilizing pretrained models from PyTorch Hub Methods for training networks with limited inputs Sifting through unreliable results to diagnose and fix problems in your neural network Improve your results with augmented data, better model architecture, and fine tuning This Book Is Written For For Python programmers with an interest in machine learning. No experience with PyTorch or other deep learning frameworks is required. About The Authors Eli Stevens has worked in Silicon Valley for the past 15 years as a software engineer, and the past 7 years as Chief Technical Officer of a startup making medical device software. Luca Antiga is co-founder and CEO of an AI engineering company located in Bergamo, Italy, and a regular contributor to PyTorch. Thomas Viehmann is a Machine Learning and PyTorch speciality trainer and consultant based in Munich, Germany and a PyTorch core developer. Table of Contents PART 1 - CORE PYTORCH 1 Introducing deep learning and the PyTorch Library 2 Pretrained networks 3 It starts with a tensor 4 Real-world data representation using tensors 5 The mechanics of learning 6 Using a neural network to fit the data 7 Telling birds from airplanes: Learning from images 8 Using convolutions to generalize PART 2 - LEARNING FROM IMAGES IN THE REAL WORLD: EARLY DETECTION OF LUNG CANCER 9 Using PyTorch to fight cancer 10 Combining data sources into a unified dataset 11 Training a classification model to detect suspected tumors 12 Improving training with metrics and augmentation 13 Using segmentation to find suspected nodules 14 End-to-end nodule analysis, and where to go next PART 3 - DEPLOYMENT 15 Deploying to production

JavaScript is at the heart of almost every modern Web application, whether it's Google Apps, Twitter, or the newest browser-based game. Though it's simple for beginners to pick up and play with, JavaScript is not a toy—it's a flexible and complex language that can be used to build full-scale applications. Eloquent JavaScript dives into this flourishing language and teaches you to write code that's beautiful and effective. By immersing you in example code and encouraging experimentation right from the start, the author quickly gives you the tools you need to build your own programs. As you follow along with examples like an artificial life simulation and a version of the classic game Sokoban, you'll learn to: –Understand the essential elements of programming: syntax, control, and data –Use object-oriented and functional programming techniques to organize and clarify your programs –Script the browser and make basic Web applications –Work with tools like regular expressions and XMLHttpRequest objects And since programming is an art that's best learned by doing, all example code is available online in an interactive sandbox for you to experiment with. With Eloquent JavaScript as your guide, you can tweak, expand, and modify the author's code, or throw it away and build your own creations from scratch. Before you know it, you'll be fluent in the language of the Web.

Python Crash Course is a fast-paced, thorough introduction to Python that will have you writing programs, solving problems, and making things that work in no time. In the first half of the book, you'll learn about basic programming concepts, such as lists, dictionaries, classes, and loops, and practice writing clean and readable code with exercises for each topic. You'll also learn how to make your programs interactive and how to test your code safely before adding it to a project. In the second half of the book, you'll put your new knowledge into practice with three substantial projects: a Space Invaders–inspired arcade game, data visualizations with Python's super-handy libraries, and a simple web app you can deploy online. As you work through Python Crash Course you'll learn how to: –Use powerful Python libraries and tools, including matplotlib, NumPy, and Pygal –Make 2D games that respond to keypresses and mouse clicks, and that grow more difficult as the game progresses –Work with data to generate interactive visualizations –Create and customize Web apps and deploy them safely online

–Deal with mistakes and errors so you can solve your own programming problems If you've been thinking seriously about digging into programming, Python Crash Course will get you up to speed and have you writing real programs fast. Why wait any longer? Start your engines and code! Uses Python 2 and 3

For more than a decade, Ruby developers have turned to The Ruby Way for reliable "how-to" guidance on effective Ruby programming. Now, Hal Fulton and André Arko have thoroughly updated this classic guide to cover new language enhancements and developers' experiences through Ruby 2.1. The new edition illuminates Ruby 2.1 through 400+ examples, each answering the question: "How do I do this in Ruby?" For each example, they present both a task description and realistic technical constraints. Next, they walk step-by-step through presenting one good solution, offering detailed explanations to promote deeper understanding. Conveniently organized by topic, The Ruby Way, Third Edition makes it easier than ever to find the specific solution you want—and to write better code by reflecting Ruby's unique philosophy and spirit. Coverage includes Ruby 2.1 overview: terminology, philosophy, and basic principles Best practices for strings and regular expressions Efficiently internationalizing your code Performing calculations (including trigonometry, calculus, statistics, and time/date calculations) Working with "Rubyesque" objects such as symbols and ranges Using arrays, hashes, stacks, queues, trees, graphs, and other data structures Efficiently storing data with YAML, JSON, and SQLite3 Leveraging object-oriented and dynamic features, from multiple constructors to program inspection Building GUIs with Shoes 4, Ruby/Tk, Ruby/GTK3, QtRuby, and other toolkits Improving thread performance by understanding Ruby's synchronization methods and avoiding its pitfalls Automating system administration with Ruby Data formats: JSON, XML, RSS, Atom, RMagick, PDF, and more Testing and debugging with RSpec, Minitest, Cucumber, byebug, and pry Measuring Ruby program performance Packaging and distributing code, and managing dependencies with Bundler Network programming: clients, time servers, POP, SMTP, IMAP, Open-URI Web applications: HTTP servers, Rails, Sinatra, HTML generation, and more Writing distributed Ruby software with drb Choosing modern development tools that maximize your productivity All source code for this book may be downloaded at www.rubyhacker.com. informit.com/aw informit.com/ruby rubyhacker.com/therubyway therubyway.io

What will you learn from this book? What's all the buzz about this Ruby language? Is it right for you? Well, ask yourself: are you tired of all those extra declarations, keywords, and compilation steps in your other language? Do you want to be a more productive programmer? Then you'll love Ruby. With this unique hands-on learning experience, you'll discover how Ruby takes care of all the details for you, so you can simply have fun and get more done with less code. Why does this book look so different? Based on the latest research in cognitive science and learning theory, Head First Ruby uses a visually rich format to engage your mind, rather than a text-heavy approach to put 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.

A guide to Ruby programming covers such topics as working with objects, strings, and variables; implementing conditional logic; working with Regular Expressions; object-oriented programming; and debugging.

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

Data science libraries, frameworks, modules, and toolkits are great for doing data science, but they're also a good way to dive into the discipline without actually understanding data science. In this book, you'll learn how many of the most fundamental data science tools and algorithms work by implementing them from scratch. If you have an aptitude for mathematics and some programming skills, author Joel Grus will help you get comfortable with the math and statistics at the core of data science, and with hacking skills you need to get started as a data scientist. Today's messy glut of data holds answers to questions no one's even thought to ask. This book provides you with the know-how to dig those answers out. Get a crash course in Python Learn the basics of linear algebra, statistics, and probability—and understand how and when they're used in data science Collect, explore, clean, munge, and manipulate data Dive into the fundamentals of machine learning Implement models such as k-nearest Neighbors, Naive Bayes, linear and logistic regression, decision trees, neural networks, and clustering Explore recommender systems, natural language processing, network analysis, MapReduce, and databases

Learning Ruby on Rails has never been this fast and easy, or fun! Veteran Codemy.com programmer John Elder walks you step by step through the ins and outs of Rails for Web Development. Written for the absolute beginner, you don't need any programming experience to dive in and get started with this book. Follow along as John builds a Pinterest-style website from start to finish that allows people to sign up, log in and out, edit their profile, upload images to the database and style those images on the screen. By the end, you'll be well on your way to becoming a professional Ruby on Rails coder!

The Complete Guide to Writing More Maintainable, Manageable, Pleasing, and Powerful Ruby Applications Ruby's widely admired ease of use has a downside: Too many Ruby and Rails applications have been created without concern for their long-term maintenance or evolution. The Web is awash in Ruby code that is now virtually impossible to change or extend. This text helps you solve that problem by using powerful real-world object-oriented design techniques, which it thoroughly explains using simple and practical Ruby examples. Sandi Metz has distilled a lifetime of conversations and presentations about object-oriented design into a set of Ruby-focused practices for crafting manageable, extensible, and pleasing code. She shows you how to build new applications that can survive success and repair existing applications that have become impossible to change. Each technique is illustrated with extended examples, all downloadable from the companion Web site,poodr.info. The first title to focus squarely on object-oriented Ruby application design, Practical

Object-Oriented Design in Ruby will guide you to superior outcomes, whatever your previous Ruby experience. Novice Ruby programmers will find specific rules to live by; intermediate Ruby programmers will find valuable principles they can flexibly interpret and apply; and advanced Ruby programmers will find a common language they can use to lead development and guide their colleagues. This guide will help you Understand how object-oriented programming can help you craft Ruby code that is easier to maintain and upgrade Decide what belongs in a single Ruby class Avoid entangling objects that should be kept separate Define flexible interfaces among objects Reduce programming overhead costs with duck typing Successfully apply inheritance Build objects via composition Design cost-effective tests Solve common problems associated with poorly designed Ruby code

Presents an introduction to the open-source electronics prototyping platform.

Take the guesswork out of using regular expressions. With more than 140 practical recipes, this cookbook provides everything you need to solve a wide range of real-world problems. Novices will learn basic skills and tools, and programmers and experienced users will find a wealth of detail. Each recipe provides samples you can use right away. This revised edition covers the regular expression flavors used by C#, Java, JavaScript, Perl, PHP, Python, Ruby, and VB.NET. You'll learn powerful new tricks, avoid flavor-specific gotchas, and save valuable time with this huge library of practical solutions. Learn regular expressions basics through a detailed tutorial Use code listings to implement regular expressions with your language of choice Understand how regular expressions differ from language to language Handle common user input with recipes for validation and formatting Find and manipulate words, special characters, and lines of text Detect integers, floating-point numbers, and other numerical formats Parse source code and process log files Use regular expressions in URLs, paths, and IP addresses Manipulate HTML, XML, and data exchange formats Discover little-known regular expression tricks and techniques

Summary: Ruby 1.9 was a major release of the language: it introduced multinationalization, new block syntax and scoping rules, a new, faster, virtual machine, and hundreds of new methods in dozens of new classes and modules. Ruby 2.0 is less radical--it has keyword arguments, a new regexp engine, and some library changes. This book describes it all. The first quarter of the book is a tutorial introduction that gets you up to speed with the Ruby language and the most important classes and libraries. Download and play with the hundreds of code samples as your experiment with the language. The second section looks at real-world Ruby, covering the Ruby environment, how to package, document, and distribute code, and how to work with encodings. The third part of the book is more advanced. In it, you'll find a full description of the language, an explanation of duck typing, and a detailed description of the Ruby object model and metaprogramming. The book ends with a reference section: comprehensive and detailed documentation of Ruby's

libraries. You'll find descriptions and examples of more than 1,300 methods in 58 built-in classes and modules, along with brief descriptions of 97 standard libraries. Ruby makes your programming more productive; it makes coding fun again. And this book will get you up to speed with the very latest Ruby, quickly and enjoyably.

Rails is a robust, flexible development platform that lets you build complex websites quickly. Major websites like GitHub, Hulu, and Twitter have run Rails under the hood, and if you know just enough HTML and CSS to be dangerous, Rails Crash Course will teach you to harness Rails for your own projects and create web applications that are fast, stable, and secure. In Part I, you'll learn Ruby and Rails fundamentals and then dive straight into models, controllers, views, and deployment. As you work through the basics, you'll learn how to: –Craft persistent models with Active Record –Build view templates with Embedded Ruby –Use Git to roll back to previous versions of your code base –Deploy applications to Heroku In Part II, you'll take your skills to the next level as you build a social networking app with more advanced Ruby tools, such as modules and metaprogramming, and advanced data modeling techniques within Rails's Active Record. You'll learn how to: –Implement an authentication system to identify authorized users –Write your own automated tests and refactor your code with confidence –Maximize performance with the asset pipeline and turbolinks –Secure your app against SQL injection and cross-site scripting –Set up a server and deploy applications with Capistrano Each chapter is packed with hands-on examples and exercises to reinforce what you've learned. Whether you're completely new to Ruby or you've been mucking around for a bit, Rails Crash Course will take you from the basics to shipping your first Rails application, fast.

It's easy to write correct Ruby code, but to gain the fluency needed to write great Ruby code, you must go beyond syntax and absorb the "Ruby way" of thinking and problem solving. In Eloquent Ruby, Russ Olsen helps you write Ruby like true Rubyists do–so you can leverage its immense, surprising power. Olsen draws on years of experience internalizing the Ruby culture and teaching Ruby to other programmers. He guides you to the "Ah Ha!" moments when it suddenly becomes clear why Ruby works the way it does, and how you can take advantage of this language's elegance and expressiveness. Eloquent Ruby starts small, answering tactical questions focused on a single statement, method, test, or bug. You'll learn how to write code that actually looks like Ruby (not Java or C#); why Ruby has so many control structures; how to use strings, expressions, and symbols; and what dynamic typing is really good for. Next, the book addresses bigger questions related to building methods and classes. You'll discover why Ruby classes contain so many tiny methods, when to use operator overloading, and when to avoid it. Olsen explains how to write Ruby code that writes its own code–and why you'll want to. He concludes with powerful project-level features and techniques ranging from gems to Domain Specific Languages. A part of the renowned Addison-Wesley Professional Ruby Series, Eloquent Ruby

will help you "put on your Ruby-colored glasses" and get results that make you a true believer.
Learn the principles behind object-oriented programming and within a few chapters create a fully functional Ruby application. You'll also gain a basic understanding of many ancillary technologies such as databases, XML, web frameworks, and networking - some of which are needed as part of a fully functioning Ruby application. Based on the bestselling first and second editions, Beginning Ruby, Third Edition is a leading guide to learn Ruby from the ground up. The new edition of this book provides the same excellent introduction to Ruby as the previous editions plus updates for the newest version of Ruby 2.3. This book can also be used as a textbook or companion to a textbook on beginning Ruby programming. The light and agile Ruby programming language remains a very popular open source scripting option for developers building today's web and even some enterprise applications. And, now, Ruby also has applications using the Raspberry Pi, popular among hobbyists and makers. Many former Java developers still use Ruby on Rails today, the most popular framework for building Ruby applications. What You'll Learn Discover the fundamentals of Ruby and its object-oriented building blocks Use the Ruby libraries, gems, and documentation Work with files and databases Write and deploy Ruby applications Harness the various Ruby web frameworks and how to use them Do network programming with Ruby Who This Book Is For Beginning programmers, programmers new to Ruby, and web developers interested in learning and knowing the foundations of the Ruby programming language.
Ruby is famous for being easy to learn, but most users only scratch the surface of what it can do. While other books focus on Ruby's trendier features, The Book of Ruby reveals the secret inner workings of one of the world's most popular programming languages, teaching you to write clear, maintainable code. You'll start with the basics—types, data structures, and control flows—and progress to advanced features like blocks, mixins, metaclasses, and beyond. Rather than bog you down with a lot of theory, The Book of Ruby takes a hands-on approach and focuses on making you productive from day one. As you follow along, you'll learn to: –Leverage Ruby's succinct and flexible syntax to maximize your productivity –Balance Ruby's functional, imperative, and object-oriented features –Write self-modifying programs using dynamic programming techniques –Create new fibers and threads to manage independent processes concurrently –Catch and recover from execution errors with robust exception handling –Develop powerful web applications with the Ruby on Rails framework Each chapter includes a "Digging Deeper" section that shows you how Ruby works under the hood, so you'll never be caught off guard by its deceptively simple scoping, multithreading features, or precedence rules. Whether you're new to programming or just new Ruby, The Book of Ruby is your guide to rapid, real-world software development with this unique and elegant language.
Ready to transport your web applications into the Web 2.0 era? Head First Rails takes your programming -- and productivity -- to

the max. You'll learn everything from the fundamentals of Rails scaffolding to building customized interactive web apps using Rails' rich set of tools and the MVC framework. By the time you're finished, you'll have learned more than just another web framework. You'll master database interactions, integration with Ajax and XML, rich content, and even dynamic graphing of your data -- all in a fraction of the time it takes to build the same apps with Java, PHP, ASP.NET, or Perl. You'll even get comfortable and familiar with Ruby, the language that underpins Rails. But you'll do it in the context of web programming, and not through boring exercises such as "Hello, World!" Your time is way too valuable to waste struggling with new concepts. Using the latest research in cognitive science and learning theory to craft a multi-sensory learning experience, Head First Rails uses a visually rich format designed to take advantage of the way your brain really works.

The second edition of the best-selling Python book in the world (over 1 million copies sold!). A fast-paced, no-nonsense guide to programming in Python. Updated and thoroughly revised to reflect the latest in Python code and practices. Python Crash Course is the world's best-selling guide to the Python programming language. This fast-paced, thorough introduction to programming with Python will have you writing programs, solving problems, and making things that work in no time. In the first half of the book, you'll learn basic programming concepts, such as variables, lists, classes, and loops, and practice writing clean code with exercises for each topic. You'll also learn how to make your programs interactive and test your code safely before adding it to a project. In the second half, you'll put your new knowledge into practice with three substantial projects: a Space Invaders-inspired arcade game, a set of data visualizations with Python's handy libraries, and a simple web app you can deploy online. As you work through the book, you'll learn how to: • Use powerful Python libraries and tools, including Pygame, Matplotlib, Plotly, and Django • Make 2D games that respond to keypresses and mouse clicks, and that increase in difficulty • Use data to generate interactive visualizations • Create and customize web apps and deploy them safely online • Deal with mistakes and errors so you can solve your own programming problems If you've been thinking about digging into programming, Python Crash Course will get you writing real programs fast. Why wait any longer? Start your engines and code!

Apps! Websites! Rubber Ducks! Naked Ninjas! This book has everything. If you want to get started in user experience design (UX), you've come to the right place: 100 self-contained lessons that cover the whole spectrum of fundamentals. Forget dry, technical material. This book—based on the wildly popular UX Crash Course from Joel Marsh's blog The Hipper Element—is laced with the author's snarky brand of humor, and teaches UX in a simple, practical way. Becoming a professional doesn't have to be boring. Follow the real-life UX process from start-to-finish and apply the skills as you learn, or refresh your memory before the next meeting. UX for Beginners is perfect for non-designers who want to become designers, managers who teach UX, and programmers, salespeople, or marketers who want to learn more. Start from scratch: the fundamentals of UX Research the weird and wonderful things users do The process and science of making anything user-friendly Use size, color, and layout to help and influence users Plan and create wireframes Make your designs feel engaging and persuasive Measure how your design works in the real world Find out what a UX designer does all day

Microsoft Azure Essentials from Microsoft Press is a series of free ebooks designed to help you advance your technical skills with Microsoft Azure. The first ebook in the series, Microsoft Azure Essentials: Fundamentals of Azure, introduces developers and IT professionals to the wide range of capabilities in Azure. The authors - both Microsoft MVPs in Azure - present both conceptual and how-to content for key areas, including: Azure Websites and Azure Cloud Services Azure Virtual Machines Azure Storage Azure Virtual Networks Databases Azure Active Directory Management tools Business scenarios Watch Microsoft Press's blog and Twitter (@MicrosoftPress) to learn about other free ebooks in the "Microsoft Azure Essentials" series.

Offers a Ruby tutorial featuring fifty-two exercises that cover such topics as installing the Ruby environment, organizing and writing code, strings and text, object-oriented programming, debugging and automated testing, and basic game development.

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Used by sites as varied as Twitter, GitHub, Disney, and Airbnb, Ruby on Rails is one of the most popular frameworks for developing web applications, but it can be challenging to learn and use. Whether you're new to web development or new only to Rails, Ruby on Rails™ Tutorial, Fourth Edition, is the solution. Best-selling author and leading Rails developer Michael Hartl teaches Rails by guiding you through the development of three example applications of increasing sophistication. The tutorial's examples focus on the general principles of web development needed for virtually any kind of website. The updates to this edition include full compatibility with Rails 5, a division of the largest chapters into more manageable units, and a huge number of new exercises interspersed in each chapter for maximum reinforcement of the material. This indispensable guide provides integrated tutorials not only for Rails, but also for the essential Ruby, HTML, CSS, and SQL skills you need when developing web applications. Hartl explains how each new technique solves a real-world problem, and then he demonstrates it with bite-sized code that's simple enough to understand, yet novel enough to be useful. Whatever your previous web development experience, this book will guide you to true Rails mastery. This book will help you Install and set up your Rails development environment, including pre-installed integrated development environment (IDE) in the cloud Go beyond generated code to truly understand how to build Rails applications from scratch Learn testing and test-driven development (TDD) Effectively use the Model-View-Controller (MVC) pattern Structure applications using the REST architecture Build static pages and transform them into dynamic ones Master the Ruby programming skills all Rails developers need Create high-quality site layouts and data models Implement registration and authentication systems, including validation and secure passwords Update, display, and delete users Upload images in production using a cloud storage service Implement account activation and password reset, including sending email with Rails Add social features and microblogging, including an introduction to Ajax Record version changes with Git and create a secure remote repository at Bitbucket Deploy your applications early and often with Heroku

It's easier to learn how to program a computer than it has ever been before. Now everyone can learn to write programs for themselves - no previous experience is necessary. Chris Pine takes a thorough, but lighthearted approach that teaches you the fundamentals of computer programming, with a minimum of fuss or bother. Whether you are interested in a new hobby or a new

career, this book is your doorway into the world of programming. Computers are everywhere, and being able to program them is more important than it has ever been. But since most books on programming are written for other programmers, it can be hard to break in. At least it used to be. Chris Pine will teach you how to program. You'll learn to use your computer better, to get it to do what you want it to do. Starting with small, simple one-line programs to calculate your age in seconds, you'll see how to write interactive programs, to use APIs to fetch live data from the internet, to rename your photos from your digital camera, and more. You'll learn the same technology used to drive modern dynamic websites and large, professional applications. Whether you are looking for a fun new hobby or are interested in entering the tech world as a professional, this book gives you a solid foundation in programming. Chris teaches the basics, but also shows you how to think like a programmer. You'll learn through tons of examples, and through programming challenges throughout the book. When you finish, you'll know how and where to learn more - you'll be on your way. What You Need: All you need to learn how to program is a computer (Windows, macOS, or Linux) and an internet connection. Chris Pine will lead you through setting set up with the software you will need to start writing programs of your own. This book is packed with step-by-step instructions and practical examples, along with accompanying screenshots and code for an easy learning curve. The needs of a beginner are totally satisfied by the book. This book assumes that you are experienced in Ruby development skills - Ruby, HTML, CSS. Having knowledge of using NoSQL will help you get through the concepts quicker, but it is not mandatory. No prior knowledge of MongoDB required.
Learning Ruby has never been this fast and easy, or fun!Veteran Codemy.com programmer John Elder walks you step by step through the ins and outs of Ruby Programming. Written for the absolute beginner, you don't need any programming experience to dive in and get started with this book. Follow along as John teaches you to set up a development environment and write your first program. You'll learn about Variables, Math, IF/THEN Statements, Array, Hashes, Loops, Methods and much more.By the end, you'll be well on your way to becoming a professional Ruby coder!Build on your skills with practice exercises at the end of each chapter and build a math flashcard game using all the skills you've learned throughout the book. It really is this easy to learn Ruby!*AUTHOR UPDATE: C9, the development environment we used in the book, was purchased by Amazon and is no longer accepting new users unless you sign up through my education account at Codemy.com/c9
A tutorial and reference to the object-oriented programming language for beginning to experienced programmers, updated for version 1.8, describes the language's structure, syntax, and operation, and explains how to build applications. Original. (Intermediate)
The book is written in beginner's guide style with each aspect of NumPy demonstrated with real world examples and required screenshots.If you are a programmer, scientist, or engineer who has basic Python knowledge and would like to be able to do numerical computations with Python, this book is for you. No prior knowledge of NumPy is required.
Transform Your Ideas into High-Quality Python Code! Zed Shaw has perfected the world's best system for becoming a truly effective Python 3.x developer. Follow it and you will succeed—just like the tens of millions of programmers he's already taught.

You bring the discipline, commitment, and persistence; the author supplies everything else. In Learn Python 3 the Hard Way, Zed Shaw taught you the basics of Programming with Python 3. Now, in Learn More Python 3 the Hard Way, you'll go far beyond the basics by working through 52 brilliantly crafted projects. Each one helps you build a key practical skill, combining demos to get you started and challenges to deepen your understanding. Zed then teaches you even more in 12 hours of online videos, where he shows you how to break, fix, and debug your code. First, you'll discover how to analyze a concept, idea, or problem to implement in software. Then, step by step, you'll learn to design solutions based on your analyses and implement them as simply and elegantly as possible. Throughout, Shaw stresses process so you can get started and build momentum, creativity to solve new problems, and quality so you'll build code people can rely on. Manage complex projects with a programmer's text editor Leverage the immense power of data structures Apply algorithms to process your data structures Master indispensable text parsing and processing techniques Use SQL to efficiently and logically model stored data Learn powerful command-line tools and skills Combine multiple practices in complete projects 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 go beyond merely writing code that runs: you'll craft high-quality Python code that solves real problems. You'll be a serious Python programmer. Perfect for Everyone Who's Already Started Working with Python, including Junior Developers and Seasoned Python Programmers Upgrading to Python 3.6+ Register your product at informit.com/register for convenient access to downloads, updates, and/or corrections as they become available.
Are You Ready To Learn Ruby Easily? This book aims to guide a complete novice in Ruby programming. This book is carefully crafted to aid the new or inexperienced programmer in learning to write a code in Ruby language. If you are someone who somehow developed a fear to explore the unknown and still interested in learning Ruby programming, then this book can truly help you. This book covers everything that a beginner in Ruby programming should learn. Understand that programming offers an infinite amount of information and knowledge. However, this book understands that it may overwhelm a mere beginner in programming if it tackles even the advanced features of the Ruby language. This book can help you build a solid, basic knowledge in programming that can help you a lot when you begin to write your own program in Ruby language. You can use the acquired knowledge to pursue or learn more about Ruby's advanced concepts later on. For now, just concentrate on the basics and make sure to absorb every lesson before you go to the next one. Practice makes perfect and this book provides a lot of practice programs or exercises that can help you enhance your experience in Ruby programming. The exercises are simple and easy to understand to help you comprehend the lesson quickly. You also need to take note of the error messages that you may encounter. Let them serve as your guide so you can avoid the same mistake in the future or help you resolve the same error when you encounter them once more. Learning Ruby programming in 7 days is not something impossible to accomplish. Even a person with a little or no experience with any programming language can learn it within those days. As you go through each lesson, you will notice that it is quite easy to understand. It becomes much simpler when you have patience and discipline. Understand that you will be able to learn the Ruby basics in 7 days, but that won't make you an instant expert. You still need to practice and work your

way in discovering the cool things that you can do with Ruby as you go along. Even expert programmers need to spend ample time in honing their programming skills. Before you know it, you are ready to create a more complex program.This book presents everything that a novice may need in understanding the basic Ruby programming. It is presented in such a way that anyone without prior programming knowledge will find it easy to understand - most technical jargons were kept to minimal, and they are the terminologies that you will likely encounter once you have started writing your program. Here's What You'll Learn From This Ruby For Beginners Book: ? Chapter 1: Getting acquainted with ruby ? Chapter 2: Initial Preparations ? Chapter 3: Start with the Basics ? Chapter 4: Ruby Variables ? Chapter 5: All About Methods ? Chapter 6: Flow Control ? Chapter 7: Iterators and Loops ? Chapter 8: More on Arrays and Hashes What Are You Waiting For? Start Coding Ruby Right Now!

What is One Way to Become A Skilled, In-Demand Programmer?Start with Ruby!In the world of programming, many types of languages are being used. If you are just starting out, the first decision that you will have to make is which of these coding tools should you use. Learning how to code brings upon foreign concepts, technical jargon and many challenges. With that being said, one needs to be smart in choosing the perfect programming language that they feel would best complement their level of comprehension. Ruby is a highly recommended programming language that will help you get started. Why is Ruby Beneficial to Learn and In-Demand? 1. One of the easiest programming languages to learn. 2. It has a huge and functional ecosystem. 3. It is very flexible to use. 4. Ruby uses simple naming conventions to indicate extent of variables. 5. Ruby is loaded with other outstanding features. Those are just a few advantages to keep you in the loop. As you explore more of its benefits by reading Ruby Beginner's Crash Course you'll be confident enough to begin exploring this amazing programming language. What Will You Learn in this Book?-What Ruby Is -How To Install Ruby -How to Get Started -How Data is Structured In Ruby -How To Write A Web Application Using Ruby On Rails Buy this book now to quickly learn Ruby and open yourself up to a whole new world of possibilities! Pick up your copy today so we can get started!

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