

Computer Science Programming Basics In Ruby

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Ruby For Kids For Dummies Christopher Haupt 2016-01-26 The fun way to introduce coding with Ruby to kids If you don't have the chance to take coding classes at school or in camp—or if you just want to learn on your own—Ruby For Kids gears you up to expand your technology skills and learn this popular programming language. Written in a way that's easy to follow—and keeping the super tech-heavy stuff to a minimum—it quickly and easily shows you how to use Ruby to create web and mobile applications with no experience required. Ruby is considered one of the best and simplest languages to start with when you're learning coding. This fun and friendly guide makes it even easier. Broken down into simple projects designed to appeal to younger programmers, Ruby For Kids gets you up and running with core coding concepts in no time. Before you know it, you'll be tackling hands-on projects, enjoying the support of a vibrant community, and feeling a sense of accomplishment as you complete projects. Navigate the basics of coding with the Ruby language Use Ruby to create your own applications and games Find help from other Ruby users Offers tips for parents and teachers helping kids learn Ruby So what are you waiting for? Ruby For Kids has everything you need to get in on one of the most popular topics around!

Polished Ruby Programming Jeremy Evans 2021-07-16 Elevate your Ruby skills to an advanced level by deepening your understanding of the design principles, best practices, and trade-offs involved in implementation approaches to future-proof your Ruby applications Key Features Learn Ruby web application design principles and strategies for databases, security, and testing from a Ruby committer Understand the design principles behind polished Ruby code and trade-offs between implementation approaches Use metaprogramming and DSLs to reduce the amount of code needed without decreasing maintainability Book Description Anyone striving to become an expert Ruby programmer needs to be able to write maintainable applications. Polished Ruby Programming will help you get better at designing scalable and robust Ruby programs, so that no matter how big the codebase grows, maintaining it will be a breeze. This book takes you on a journey through implementation approaches for many common programming situations, the trade-offs inherent in each approach, and why you may choose to use different approaches in different situations. You'll start by refreshing Ruby fundamentals, such as correctly using core classes, class and method design, variable usage, error handling, and code formatting. Then you'll move

on to higher-level programming principles, such as library design, use of metaprogramming and domain-specific languages, and refactoring. Finally, you'll learn principles specific to web application development, such as how to choose a database and web framework, and how to use advanced security features. By the end of this Ruby programming book, you'll be a well rounded web developer with a deep understanding of Ruby. While most code examples and principles discussed in the book apply to all Ruby versions, some examples and principles are specific to Ruby 3.0, the latest release at the time of publication. What you will learn

- Use Ruby's core classes and design custom classes effectively
- Explore the principles behind variable usage and method argument choice
- Implement advanced error handling approaches such as exponential backoff
- Design extensible libraries and plugin systems in Ruby
- Use metaprogramming and DSLs to avoid code redundancy
- Implement different approaches to testing and understand their trade-offs
- Discover design patterns, refactoring, and optimization with Ruby
- Explore database design principles and advanced web app security

Who this book is for
This book is for Ruby programmers who are comfortable in coding with Ruby but want to advance their skills by mastering the deeper principles and best practices behind writing maintainable, scalable, optimized, and well-structured Ruby code. This book won't teach you the basics of Ruby - you'll need intermediate knowledge and practical experience before you can dive in.

The Book of Ruby Huw Collingbourne 2011-07-11 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.

The DRuby Book Masatoshi Seki 2012 Presents a guide to the Distributed Ruby Library and offers information on design concepts, multithreading, object references, garbage collection, and security.

Computer Science Programming Basics in Ruby 2013

Hello Ruby: Journey Inside the Computer Linda Liukas 2017-10-03 Welcome back to the world's most whimsical way to learn about technology and coding as a programming superstar introduces kids to the basic components of a computer through storytelling and imaginative activities.

Ruby Cookbook Lucas Carlson 2015-03-24 Why spend time on coding problems that others have already solved when you could be making real progress on your Ruby

project? This updated cookbook provides more than 350 recipes for solving common problems, on topics ranging from basic data structures, classes, and objects, to web development, distributed programming, and multithreading. Revised for Ruby 2.1, each recipe includes a discussion on why and how the solution works. You'll find recipes suitable for all skill levels, from Ruby newbies to experts who need an occasional reference. With Ruby Cookbook, you'll not only save time, but keep your brain percolating with new ideas as well. Recipes cover: Data structures including strings, numbers, date and time, arrays, hashes, files and directories Using Ruby's code blocks, also known as closures OOP features such as classes, methods, objects, and modules XML and HTML, databases and persistence, and graphics and other formats Web development with Rails and Sinatra Internet services, web services, and distributed programming Software testing, debugging, packaging, and distributing Multitasking, multithreading, and extending Ruby with other languages

Ruby Wizardry Eric Weinstein 2014-12-14 The Ruby programming language is perfect for beginners: easy to learn, powerful, and fun to use! But wouldn't it be more fun if you were learning with the help of some wizards and dragons? Ruby Wizardry is a playful, illustrated tale that will teach you how to program in Ruby by taking you on a fantastical journey. As you follow the adventures of young heroes Ruben and Scarlet, you'll learn real programming skills, like how to: -Use fundamental concepts like variables, symbols, arrays, and strings -Work with Ruby hashes to create a programmable breakfast menu -Control program flow with loops and conditionals to help the Royal Plumber -Test your wild and crazy ideas in IRB and save your programs as scripts -Create a class of mini-wizards, each with their own superpower! -Organize and reuse your code with methods and lists -Write your own amazing interactive stories using Ruby Along the way, you'll meet colorful characters from around the kingdom, like the hacker Queen, the Off-White Knight, and Wherefore the minstrel. Ruby Wizardry will have you (or your little wizard) hooked on programming in no time. For ages 10+ (and their parents!)

Learn Ruby the Hard Way Zed Shaw 2014 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.

Eloquent Ruby Russ Olsen 2011-02-07 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.

Metaprogramming Ruby 2 Paolo Perrotta 2014 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.

Ruby Under a Microscope Pat Shaughnessy 2013 "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"--

Distributed Programming with Ruby Mark Bates 2009-11-05 Complete, Hands-On Guide to Building Advanced Distributed Applications with Ruby Distributed programming techniques make applications easier to scale, develop, and deploy--especially in emerging cloud computing environments. Now, one of the Ruby community's leading experts has written the first definitive guide to distributed programming with Ruby. Mark Bates begins with a simple distributed application, and then walks through an increasingly complex series of examples, demonstrating solutions to the most common distributed programming problems. Bates presents the industry's most useful coverage of Ruby's standard distributed programming libraries, DRb and Rinda. Next, he introduces powerful third-party tools, frameworks, and libraries designed to simplify Ruby distributed programming, including his own Distribunaut. If you're an experienced Ruby programmer or architect, this hands-on tutorial and practical reference will help you meet any distributed programming challenge, no matter how complex. Coverage includes Writing robust, secure, and interactive applications using DRb--and managing its drawbacks Using Rinda to build applications with improved flexibility, fault tolerance, and service discovery Simplifying DRb service management with RingyDingy Utilizing Starfish to facilitate communication between distributed programs and to write MapReduce functions for processin large data sets Using Politics to customize the processes running on individual server instances in a cloud computing environment Providing reliable distributed queuing with the low-overhead Starling messaging server Implementing comprehensive enterprise messaging with RabbitMQ and Advanced Message Queuing Protocol (AMQP) Offloading heavyweight tasks with BackgroundDRb and DelayedJob

Computer Science Programming Basics in Ruby Ophir Frieder 2013-04-18 If you know basic high-school math, you can quickly learn and apply the core concepts of computer science with this concise, hands-on book. Led by a team of experts,

you'll quickly understand the difference between computer science and computer programming, and you'll learn how algorithms help you solve computing problems. Each chapter builds on material introduced earlier in the book, so you can master one core building block before moving on to the next. You'll explore fundamental topics such as loops, arrays, objects, and classes, using the easy-to-learn Ruby programming language. Then you'll put everything together in the last chapter by programming a simple game of tic-tac-toe. Learn how to write algorithms to solve real-world problems Understand the basics of computer architecture Examine the basic tools of a programming language Explore sequential, conditional, and loop programming structures Understand how the array data structure organizes storage Use searching techniques and comparison-based sorting algorithms Learn about objects, including how to build your own Discover how objects can be created from other objects Manipulate files and use their data in your software

Hello Ruby: Adventures in Coding Linda Liukas 2015-10-06 Hello Ruby is the world's most whimsical way to learn about computers, programming and technology. Includes activities for all future coders.

Rails AntiPatterns Chad Pytel 2010-11-09 The Complete Guide to Avoiding and Fixing Common Rails 3 Code and Design Problems As developers worldwide have adopted the powerful Ruby on Rails web framework, many have fallen victim to common mistakes that reduce code quality, performance, reliability, stability, scalability, and maintainability. Rails™ AntiPatterns identifies these widespread Rails code and design problems, explains why they're bad and why they happen—and shows exactly what to do instead. The book is organized into concise, modular chapters—each outlines a single common AntiPattern and offers detailed, cookbook-style code solutions that were previously difficult or impossible to find. Leading Rails developers Chad Pytel and Tammer Saleh also offer specific guidance for refactoring existing bad code or design to reflect sound object-oriented principles and established Rails best practices. With their help, developers, architects, and testers can dramatically improve new and existing applications, avoid future problems, and establish superior Rails coding standards throughout their organizations. This book will help you understand, avoid, and solve problems with Model layer code, from general object-oriented programming violations to complex SQL and excessive redundancy Domain modeling, including schema and database issues such as normalization and serialization View layer tools and conventions Controller-layer code, including RESTful code Service-related APIs, including timeouts, exceptions, backgrounding, and response codes Third-party code, including plug-ins and gems Testing, from test suites to test-driven development processes Scaling and deployment Database issues, including migrations and validations System design for “graceful degradation” in the real world

The Ruby Programming Language David Flanagan 2008-01-25 A guide to Ruby programming covers such topics as datatypes and objects, expressions, classes and modules, control structures, and the Ruby platform.

Intro To Ruby Programming John Elder 2016-05-10 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](https://codemy.com/c9)

I Love Ruby Karthikeyan A K 2019-02-07 Its been a long time since I started writing I Love Ruby. I first projected this book as a toy programming book, but not any more, this book is maturing into something serious. Possibly a book to be read by people who are serious about Ruby, hence this book is undergoing a dramatic change. Its been proof read from top to bottom. All its examples are worked for Ruby 2.5, and finally this book is appearing online, epub, pdf and print. I hope you enjoy learning Ruby. It should be noted that one can get this book free absolutely free here <https://i-love-ruby.gitlab.io/>, this book is as print so that people who wish to have a printed book can have a copy.

Why's (Poignant) Guide to Ruby Why The Lucky Stiff 2020-06

Explorations in Computing John S. Conery 2014-09-24 An Active Learning Approach to Teaching the Main Ideas in Computing Explorations in Computing: An Introduction to Computer Science and Python Programming teaches computer science students how to use programming skills to explore fundamental concepts and computational approaches to solving problems. Tbook gives beginning students an introduction to

The Ruby Way Hal Fulton 2015-02-11 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

Ruby Developers Guide Syngress 2002-02-06 An expert guide to Ruby, a popular new Object-Oriented Programming Language Ruby is quickly becoming a favourite among developers who need a simple, straight forward, portable programming language. Ruby is ideal for quick and easy object-oriented programming such as processing text files or performing system management. Having been compared with other programming languages such as Perl, Python, PCL, Java, Eiffel, and C++; Ruby is popular because of its straight forward syntax and transparent semantics. Using step-by-step examples and real world applications, the Ruby Developer's Guide is designed for programmers and developer's looking to embrace the object-oriented features and functionality of this robust programming language. Readers will learn how to develop, implement, organize and deploy applications using Ruby. Ruby is currently experiencing a rapid rise in popularity in the object-oriented programming community Readers receive up-to-the minute links, white papers, and analysis for two years at solutions@syngress.com Comes with a wallet-sized CD containing a printable HTML version of the book, all of the source code examples and demos of popular Ruby third-party programming tools and applications

Mazes for Programmers Jamis Buck 2015-07-15 Unlock the secrets to creating random mazes! Whether you're a game developer, an algorithm connoisseur, or simply in search of a new puzzle, you're about to level up. Learn algorithms to randomly generate mazes in a variety of shapes, sizes, and dimensions. Bend them into Moebius strips, fold them into cubes, and wrap them around spheres. Stretch them into other dimensions, squeeze them into arbitrary outlines, and tile them in a dizzying variety of ways. From twelve little algorithms, you'll discover a vast reservoir of ideas and inspiration. From video games to movies, mazes are ubiquitous. Explore a dozen algorithms for generating these puzzles randomly, from Binary Tree to Eller's, each copiously illustrated and accompanied by working implementations in Ruby. You'll learn their pros and cons, and how to choose the right one for the job. You'll start by learning six maze algorithms and transition from making mazes on paper to writing programs that generate and draw them. You'll be introduced to Dijkstra's algorithm and see how it can help solve, analyze, and visualize mazes. Part 2 shows you how to constrain your mazes to different shapes and outlines, such as text, circles, hex and triangle grids, and more. You'll learn techniques for culling dead-ends, and for making your passages weave over and under each other. Part 3 looks at six more algorithms, taking it all to the next level. You'll learn how to build your mazes in multiple dimensions, and even on curved surfaces. Through it all, you'll discover yourself brimming with ideas, the best medicine for programmer's block, burn-out, and the grayest of days. By the time you're done, you'll be energized and full of maze-related possibilities! What You Need: The example code requires version 2 of the Ruby programming language. Some examples depend on the ChunkyPNG library to generate PNG images, and one chapter uses POV-Ray version 3.7 to render 3D graphics.

Mastering Ruby on Rails Sufyan Bin Uzayr 2022 There is no shortage of programming languages and frameworks out there. But in the midst of all this, Ruby on Rails stands out. Despite losing out on the top spot to other contenders, Ruby on Rails has earned for itself a position of repute and a robust user base. Ever since its debut in 2004, Ruby on Rails has rapidly become one of the most impactful and popular tools for building dynamic web

applications. Rails owes much of its success to its compact design and the usage of the underlying Ruby language. It effectively creates a domain-specific language for writing web applications. As a result, many common web programming tasks--such as generating HTML, making data models, and routing URLs--are easier with Rails. Although its outstanding capabilities have made Ruby on Rails one of the world's most popular web development frameworks, some might still find it challenging to learn and use. Mastering Ruby on Rails: A Beginner's Guide could be just the right solution for that. Whatever your previous web development experience is, Mastering Ruby on Rails can guide you to true Rails proficiency. It will help you to: Install and set up your Rails development environment Go beyond generated code to build Rails applications from scratch Effectively use the Model-View-Controller (MVC) pattern Master the Ruby programming skills all Rails developers need Define high-quality site layouts and data models Add social features and navigate Asynchronous Javascript and XML (Ajax) Mastering Ruby on Rails will walk you through Rails' inner workings and equip you to tackle complicated projects with solutions that are well-tested, adaptive, and easy to maintain. This book starts by explaining critical points behind object-oriented programming and builds toward creating a full Rails application within a few chapters. By the end of this book, besides in-depth knowledge of Rails, you will also have a basic understanding of many supporting technologies such as SQL, web frameworks, and Integrated Development Environment (IDE). You will be able to quickly grasp the Rails methodology by focusing on the development from the point of view of the beginner-level developer. Additionally, you will be provided with a reliable roadmap for migrating your applications, skill set, and development procedures to the newer, more flexible programming platform that Rails offers. Moreover, learning Rails development independently will let you use all the qualities like creativeness, critical thinking, and project management. Mastering Ruby on Rails serves as a complete guide to exploring Ruby on Rails, expanding your set of skills and experience that will only benefit you throughout your professional life. If you are looking to get into the fascinating world of Rails development, Mastering Ruby on Rails is the right pick for you! Learn more about our other Mastering titles at: <https://www.routledge.com/Mastering-Computer-Science/book-series/MCS>

[Design Patterns in Ruby \(Adobe Reader\)](#) Russ Olsen 2007-12-10 Praise for Design Patterns in Ruby " Design Patterns in Ruby documents smart ways to resolve many problems that Ruby developers commonly encounter. Russ Olsen has done a great job of selecting classic patterns and augmenting these with newer patterns that have special relevance for Ruby. He clearly explains each idea, making a wealth of experience available to Ruby developers for their own daily work." -Steve Metsker, Managing Consultant with Dominion Digital, Inc. "This book provides a great demonstration of the key 'Gang of Four' design patterns without resorting to overly technical explanations. Written in a precise, yet almost informal style, this book covers enough ground that even those without prior exposure to design patterns will soon feel confident applying them using Ruby. Olsen has done a great job to make a book about a classically 'dry' subject into such an engaging and even occasionally humorous read." -Peter Cooper "This book renewed my interest in understanding patterns after a decade of good intentions. Russ picked the most useful patterns for Ruby and introduced them in a straightforward and logical manner, going beyond the GoF's patterns. This book has improved my use of Ruby, and encouraged me to blow off the dust covering the GoF book." -Mike Stok " Design Patterns in Ruby is a great way for programmers from statically typed objectoriented languages to learn how design patterns appear in a more dynamic, flexible language like Ruby." -Rob Sanheim,

Ruby Ninja, Relevance Most design pattern books are based on C++ and Java. But Ruby is different—and the language's unique qualities make design patterns easier to implement and use. In this book, Russ Olsen demonstrates how to combine Ruby's power and elegance with patterns, and write more sophisticated, effective software with far fewer lines of code. After reviewing the history, concepts, and goals of design patterns, Olsen offers a quick tour of the Ruby language—enough to allow any experienced software developer to immediately utilize patterns with Ruby. The book especially calls attention to Ruby features that simplify the use of patterns, including dynamic typing, code closures, and "mixins" for easier code reuse. Fourteen of the classic "Gang of Four" patterns are considered from the Ruby point of view, explaining what problems each pattern solves, discussing whether traditional implementations make sense in the Ruby environment, and introducing Ruby-specific improvements. You'll discover opportunities to implement patterns in just one or two lines of code, instead of the endlessly repeated boilerplate that conventional languages often require. Design Patterns in Ruby also identifies innovative new patterns that have emerged from the Ruby community. These include ways to create custom objects with metaprogramming, as well as the ambitious Rails-based "Convention Over Configuration" pattern, designed to help integrate entire applications and frameworks. Engaging, practical, and accessible, Design Patterns in Ruby will help you build better software while making your Ruby programming experience more rewarding.

MacRuby: The Definitive Guide Matt Aimonetti 2011-10-13 Want to build native Mac OS X applications with a sleek, developer-friendly alternative to Objective-C? MacRuby is an ideal choice. This in-depth guide shows you how Apple's implementation of Ruby gives you access to all the features available to Objective-C programmers. You'll get clear, detailed explanations of MacRuby, including quick programming techniques such as prototyping. Perfect for programmers at any level, this book is packed with code samples and complete project examples. If you use Ruby, you can tap your skills to take advantage of Interface Builder, Cocoa libraries, the Objective-C runtime, and more. If you're a Cocoa developer, you'll learn how to improve your productivity with MacRuby. Get up to speed on MacRuby basics, including classes and methods Learn how to use MacRuby with Apple's Xcode developer suite Delve into the primitive object classes and data types in Foundation Kit Build event-driven user interfaces with the AppKit framework Handle relational object persistence with the Core Data framework Use advanced MacRuby techniques, including concurrency and sandboxing Get examples for applications using Twitter and a location web service Embed MacRuby into existing Objective-C applications

Ruby Programming for the Absolute Beginner Jerry Lee Ford, Jr. 2007 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.

Head First Rails David Griffiths 2013-05-23 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 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

Ruby in a Nutshell Yukihiro Matsumoto 2002 Introduces Ruby's object-oriented programming capabilities, detailing command-line options, syntax, built-in variables, functions, commonly used classes and modules, environment variables, operators, methods, and security.

Getting to Know Ruby Heather Moore Niver 2014-07-15 The book provides an introduction to the open-source programming language known as Ruby, including the language's history, the basics of operation, and implementation of the system's application framework, Ruby on Rails.

Ruby on Rails Tutorial Michael Hartl 2016-11-17 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

Comprehensive Ruby Programming Jordan Hudgens 2017-06-30 This book will provide you with all of the tools you need to be a professional Ruby developer. Starting with the core principles, such as syntax and best practices, and up to advanced topics like metaprogramming and big data analysis. About This Book Provides the core skills required to become a Ruby programmer Covers how to use the most popular Ruby Gem libraries Includes details on regular expressions Who This Book Is For This is a complete course written from the ground up for beginners wanting to gain a solid understanding of the Ruby language. It starts at the beginning with how to install Ruby and work with it on multiple machines, so simply have a computer that's connected to the Internet and you'll be ready. What You Will Learn Learn how to use Ruby code effectively, picking the right tool for the job and not duplicating built-in functionality Gain best software development practices, and how to identify and fix common errors Absorb core programming skills, such as variables, strings, loops, conditionals, and much more Explore object-oriented programming and learn to create modular, reusable code that you can use across projects Build 10 practical Ruby programs as you work through the book on topics such as big data analysis and solving Euler equations In Detail Ruby is a powerful, general-purpose programming language that can be applied to any task. Whether you are an experienced developer who wants to learn a new language or you are new to programming, this book is your comprehensive Ruby coding guide. Starting with the foundational principles, such as syntax, and scaling up to advanced topics such as big data analysis, this book will give you all of the tools you need to be a professional Ruby developer. A few of the key topics are: object-oriented programming, built-in Ruby methods, core programming skills, and an introduction to the Ruby on Rails and Sinatra web frameworks. You will also build 10 practical Ruby programs. Created by an experienced Ruby developer, this book has been written to ensure it focuses on the skills you will need to be a professional Ruby developer. After you have read this book, you will be ready to start building real-world Ruby projects. Style and approach This is a

comprehensive course for learning the Ruby programming language that works methodically through everything that you need to know. It begins with the basics of the language and then works through some complete projects to apply your skills and ensure that you have fully absorbed them and can use them in the real world.

Understanding Computation Tom Stuart 2013-05-15 Finally, you can learn computation theory and programming language design in an engaging, practical way. Understanding Computation explains theoretical computer science in a context you'll recognize, helping you appreciate why these ideas matter and how they can inform your day-to-day programming. Rather than use mathematical notation or an unfamiliar academic programming language like Haskell or Lisp, this book uses Ruby in a reductionist manner to present formal semantics, automata theory, and functional programming with the lambda calculus. It's ideal for programmers versed in modern languages, with little or no formal training in computer science. Understand fundamental computing concepts, such as Turing completeness in languages Discover how programs use dynamic semantics to communicate ideas to machines Explore what a computer can do when reduced to its bare essentials Learn how universal Turing machines led to today's general-purpose computers Perform complex calculations, using simple languages and cellular automata Determine which programming language features are essential for computation Examine how halting and self-referencing make some computing problems unsolvable Analyze programs by using abstract interpretation and type systems

Programming Ruby David Thomas 2004 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)

Ruby Robert Dwight 2016-05-12 Learn Ruby In 24 Hours Or Less! In this book you will find the fundamental aspects of the Ruby programming language. It will explain theories and lessons through detailed instructions and practical examples. With this eBook, you'll learn how to get Ruby, how to write Ruby statements, and how to use this language in creating your own programs. If you're searching for a comprehensive learning material for Ruby, this is the book you need. With the help of the important ideas and practical examples contained within, you will be able to master Ruby quickly even if you have never programmed anything before. By reading this material, you will become an effective Ruby programmer in 24hours (or even less). Here are some of the things you'll learn from this eBook: How to download the right version of Ruby for your computer The fundamental principles of Ruby programming The methods that you can use in Ruby How to handle program exceptions The syntax of Ruby commands How to create loops, iterators, classes, objects, variables, and many more You can certainly benefit from this eBook even if you have never programmed anything before. This eBook will teach you the basics of Ruby programming and give you the syntax of important Ruby commands. If you want to become a skilled Ruby programmer in just 24 hours, get this eBook now and read it carefully. In addition you will find inside: Collections Of Data The Sharing Functionalities Of Ruby The Regular Expressions The Methods Of The Ruby Language Ruby Expressions The Basic I/O Of Ruby And Much, Much More... Get Your Copy Right Now!

Learn to Program Chris Pine 2021-06-17 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.

Practical Programming Paul Gries 2017-12-06 Classroom-tested by tens of thousands of students, this new edition of the bestselling intro to programming book is for anyone who wants to understand computer science. Learn about design, algorithms, testing, and debugging. Discover the fundamentals of programming with Python 3.6--a language that's used in millions of devices. Write programs to solve real-world problems, and come away with everything you need to produce quality code. This edition has been updated to use the new language features in Python 3.6.

Computer Science Programming Basics in Ruby Ophir Frieder 2013-04-18 If you know basic high-school math, you can quickly learn and apply the core concepts of computer science with this concise, hands-on book. Led by a team of experts, you'll quickly understand the difference between computer science and computer programming, and you'll learn how algorithms help you solve computing problems. Each chapter builds on material introduced earlier in the book, so you can master one core building block before moving on to the next. You'll explore fundamental topics such as loops, arrays, objects, and classes, using the easy-to-learn Ruby programming language. Then you'll put everything together in the last chapter by programming a simple game of tic-tac-toe. Learn how to write algorithms to solve real-world problems Understand the basics of computer architecture Examine the basic tools of a programming language Explore sequential, conditional, and loop programming structures Understand how the array data structure organizes storage Use searching techniques and comparison-based sorting algorithms Learn about objects, including how to build your own Discover how objects can be created from other objects Manipulate files and use their data in your software