

Release It 2nd Edition O'Reilly Media

Get complete instructions for manipulating, processing, cleaning, and crunching datasets in Python. Updated for Python 3.6, the second edition of this hands-on guide is packed with practical case studies that show you how to solve a broad set of data analysis problems effectively. You'll learn the latest versions of pandas, NumPy, IPython, and Jupyter in the process. Written by Wes McKinney, the creator of the Python pandas project, this book is a practical, modern introduction to data science tools in Python. It's ideal for analysts new to Python and for Python programmers new to data science and scientific computing. Data files and related material are available on GitHub. Use the IPython shell and Jupyter notebook for exploratory computing

Learn basic and advanced features in NumPy (Numerical Python) Get started with data analysis tools in the pandas library Use flexible tools to load, clean, transform, merge, and reshape data Create informative visualizations with matplotlib Apply the pandas groupby facility to slice, dice, and summarize datasets Analyze and manipulate regular and irregular time series data Learn how to solve real-world data analysis problems with thorough, detailed examples

From lambda expressions and JavaFX 8 to new support for network programming and mobile development, Java 8 brings a wealth of changes. This cookbook helps you get up to speed right away with hundreds of hands-on recipes across a broad range of Java topics. You'll learn useful techniques for everything from debugging and data structures to GUI development and functional programming. Each recipe includes self-contained code solutions that you can freely use, along with a discussion of how and why they work. If you are familiar with Java basics, this cookbook will bolster your knowledge of the language in general and Java 8's main APIs in particular. Recipes include: Methods for compiling, running, and debugging Manipulating, comparing, and rearranging text Regular expressions for string- and pattern-matching Handling numbers, dates, and times Structuring data with collections, arrays, and other types Object-oriented and functional programming techniques Directory and filesystem operations Working with graphics, audio, and video GUI development, including JavaFX and handlers Network programming on both client and server Database access, using JPA, Hibernate, and JDBC Processing JSON and XML for data storage Multithreading and concurrency

A guide to the syntax and semantics of regular expressions for Perl 5.8, Ruby, Java, PHP, C#, .NET, Python, JavaScript, and PCRE.

Pick up where certification exams leave off. With this practical, in-depth guide to the entire network infrastructure, you'll learn how to deal with real Cisco networks, rather than the hypothetical situations presented on exams like the CCNA. Network Warrior takes you step by step through the world of routers, switches, firewalls, and other technologies based on the author's extensive field experience. You'll find new content for MPLS, IPv6, VoIP, and wireless in this completely revised second edition, along with examples of Cisco Nexus 5000 and 7000 switches throughout. Topics include: An in-depth view of routers and routing Switching, using Cisco Catalyst and Nexus switches as examples SOHO VoIP and SOHO wireless access point design and configuration Introduction to IPv6 with configuration examples Telecom technologies in the data-networking world, including T1, DS3, frame relay, and MPLS Security, firewall theory, and configuration, as well as ACL and authentication Quality of Service (QoS), with an emphasis on low-latency queuing (LLQ) IP address allocation, Network Time Protocol (NTP), and device failures

Even small applications have dozens of components. Large applications may have thousands, which makes them challenging to install, maintain, and remove. Docker bundles all application components into a package called a container that keeps things tidy and helps manage any dependencies on other applications or infrastructure. Docker in Action, Second Edition teaches you the skills and knowledge you need to create, deploy, and manage applications hosted in Docker containers. This bestseller has been fully updated with new examples, best practices, and entirely new chapters. You'll start with a clear explanation of the Docker model and learn how to package applications in containers, including techniques for testing and distributing applications. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

This book is for designers, developers, and product managers who are charged with what sometimes seems like an impossible task: making sure products work the way your users expect them to. You'll find out how to design applications and websites that people will not only use, but will absolutely love. The second edition brings the book up to date and expands it with three completely new chapters. Interaction design - the way the apps on our phones work, the way we enter a destination into our car's GPS - is becoming more and more important. Identify and fix bad software design by making usability the cornerstone of your design process. Lukas weaves together hands-on techniques and fundamental concepts. Each technique chapter explains a specific approach you can use to make your product more user friendly, such as storyboarding, usability tests, and paper prototyping. Idea chapters are concept-based: how to write usable text, how realistic your designs should look, when to use animations. This new edition is updated and expanded with new chapters covering requirements gathering, how the design of data structures influences the user interface, and how to do design work as a team. Through copious illustrations and supporting psychological research, expert developer and user interface designer Lukas Mathis gives you a deep dive into research, design, and implementation--the essential stages in designing usable interfaces for applications and websites. Lukas inspires you to look at design in a whole new way, explaining exactly what to look for - and what to avoid - in creating products that get people excited.

Kubernetes radically changes the way applications are built and deployed in the cloud. Since its introduction in 2014, this container orchestrator has become one of the largest and most popular open source projects in the world. The updated edition of this practical book shows developers and ops personnel how Kubernetes and container technology can help you achieve new levels of velocity, agility, reliability, and efficiency. Kelsey Hightower, Brendan Burns, and Joe Beda—who've worked on Kubernetes at Google and beyond—explain how this system fits into the lifecycle of a distributed application. You'll learn how to use tools and APIs to automate scalable distributed systems, whether it's for online services, machine learning applications, or a cluster of Raspberry Pi computers. Create a simple cluster to learn how Kubernetes works Dive into the details of deploying an application using Kubernetes Learn specialized objects in Kubernetes, such as DaemonSets, jobs, ConfigMaps, and secrets Explore deployments that tie together the lifecycle of a complete application Get practical examples of how to develop and deploy real-world applications in Kubernetes

Through a series of recent breakthroughs, deep learning has boosted the entire field of machine learning. Now, even programmers who know close to nothing about this technology can use simple, efficient tools to implement programs capable of learning from data. This practical book shows you how. By using concrete examples, minimal theory, and two production-ready Python frameworks—Scikit-Learn and TensorFlow—author Aurélien Géron helps you gain an intuitive understanding of the concepts and tools for building intelligent systems. You'll learn a range of techniques, starting with simple linear regression and progressing to deep neural networks. With exercises in each chapter to help you apply what you've learned, all you need is programming experience to get started. Explore the machine learning landscape, particularly neural nets Use Scikit-Learn to track an example machine-learning project end-to-end Explore several training models, including support vector machines, decision trees, random forests, and ensemble methods Use the TensorFlow library to build and train neural nets Dive into neural net architectures, including convolutional nets, recurrent nets, and deep reinforcement learning Learn techniques for training and scaling deep neural nets

Six years ago, Infrastructure as Code was a new concept. Today, as even banks and other conservative organizations plan moves to the cloud, development teams for companies worldwide are attempting to

build large infrastructure codebases. With this practical book, Kief Morris of ThoughtWorks shows you how to effectively use principles, practices, and patterns pioneered by DevOps teams to manage cloud-age infrastructure. Ideal for system administrators, infrastructure engineers, software developers, team leads, and architects, this updated edition demonstrates how you can exploit cloud and automation technology to make changes easily, safely, quickly, and responsibly. You'll learn how to define everything as code and apply software design and engineering practices to build your system from small, loosely coupled pieces. This book covers: Foundations: Use Infrastructure as Code to drive continuous change and raise the bar of operational quality, using tools and technologies to build cloud-based platforms Working with infrastructure stacks: Learn how to define, provision, test, and continuously deliver changes to infrastructure resources Working with servers and other platforms: Use patterns to design provisioning and configuration of servers and clusters Working with large systems and teams: Learn workflows, governance, and architectural patterns to create and manage infrastructure elements Docker is rapidly changing the way organizations deploy software at scale. However, understanding how Linux containers fit into your workflow—and getting the integration details right—is not a trivial task. With the updated edition of this practical guide, you'll learn how to use Docker to package your applications with all of their dependencies and then test, ship, scale, and support your containers in production. This edition includes significant updates to the examples and explanations that reflect the substantial changes that have occurred over the past couple of years. Sean Kane and Karl Matthias have added a complete chapter on Docker Compose, deeper coverage of Docker Swarm mode, introductions to both Kubernetes and AWS Fargate, examples on how to optimize your Docker images, and much more. Learn how Docker simplifies dependency management and deployment workflow for your applications Start working with Docker images, containers, and command line tools Use practical techniques to deploy and test Docker containers in production Debug containers by understanding their composition and internal processes Deploy production containers at scale inside your data center or cloud environment Explore advanced Docker topics, including deployment tools, networking, orchestration, security, and configuration

Every day, companies struggle to scale critical applications. As traffic volume and data demands increase, these applications become more complicated and brittle, exposing risks and compromising availability. With the popularity of software as a service, scaling has never been more important. Updated with an expanded focus on modern architecture paradigms such as microservices and cloud computing, this practical guide provides techniques for building systems that can handle huge quantities of traffic, data, and demand—without affecting the quality your customers expect. Architects, managers, and directors in engineering and operations organizations will learn how to build applications at scale that run more smoothly and reliably to meet the needs of customers. Learn how scaling affects the availability of your services, why that matters, and how to improve it Dive into a modern service-based application architecture that ensures high availability and reduces the effects of service failures Explore the Single Team Owned Service Architecture paradigm (STOSA)—a model for scaling your development organization in tandem with your application Understand, measure, and mitigate risk in your systems Use the cloud to build highly scalable applications

One of the main concerns for digital photographers today is asset management: how to file, find, protect, and re-use their photos. The best solutions can be found in *The DAM Book*, our bestselling guide to managing digital images efficiently and effectively. Anyone who shoots, scans, or stores digital photographs is practicing digital asset management (DAM), but few people do it in a way that makes sense. In this second edition, photographer Peter Krogh -- the leading expert on DAM -- provides new tools and techniques to help professionals, amateurs, and students: Understand the image file lifecycle: from shooting to editing, output, and permanent storage Learn new ways to use metadata and key words to track photo files Create a digital archive and name files clearly Determine a strategy for backing up and validating image data Learn a catalog workflow strategy, using Adobe Bridge, Camera Raw, Adobe Lightroom, Microsoft Expression Media, and Photoshop CS4 together Migrate images from one file format to another, from one storage medium to another, and from film to digital Learn how to copyright images To identify and protect your images in the marketplace, having a solid asset management system is essential. *The DAM Book* offers the best approach.

For those considering Extreme Programming, this book provides no-nonsense advice on agile planning, development, delivery, and management taken from the authors' many years of experience. While plenty of books address the what and why of agile development, very few offer the information users can apply directly.

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

Hit the ground running with React, the open-source technology from Facebook for building rich web applications fast. With this practical guide, Yahoo! web developer Stoyan Stefanov teaches you how to build components—React's basic building blocks—and organize them into maintainable, large-scale apps. If you're familiar with basic JavaScript syntax, you're ready to get started. Once you understand how React works, you'll build a complete custom Whinepad app that helps users rate wines and keep notes. You'll quickly learn why some developers consider React the key to the web app development puzzle. Set up React and write your first "Hello world" web app Create and use custom React components alongside generic DOM components Build a data table component that lets you edit, sort, search, and export its contents Use the JSX syntax extension as an alternative to function calls Set up a lean, low-level build process that helps you focus on React Build a complete custom app that lets you store data on the client Use ESLint, Flow, and Jest tools to check and test your code as your app evolves Manage communication between components with Flux

Salary surveys worldwide regularly place software architect in the top 10 best jobs, yet no real guide exists to help developers become architects. Until now. This book provides

the first comprehensive overview of software architecture's many aspects. Aspiring and existing architects alike will examine architectural characteristics, architectural patterns, component determination, diagramming and presenting architecture, evolutionary architecture, and many other topics. Mark Richards and Neal Ford—hands-on practitioners who have taught software architecture classes professionally for years—focus on architecture principles that apply across all technology stacks. You'll explore software architecture in a modern light, taking into account all the innovations of the past decade. This book examines: Architecture patterns: The technical basis for many architectural decisions Components: Identification, coupling, cohesion, partitioning, and granularity Soft skills: Effective team management, meetings, negotiation, presentations, and more Modernity: Engineering practices and operational approaches that have changed radically in the past few years Architecture as an engineering discipline: Repeatable results, metrics, and concrete valuations that add rigor to software architecture

How do today's most successful tech companies—Amazon, Google, Facebook, Netflix, Tesla—design, develop, and deploy the products that have earned the love of literally billions of people around the world? Perhaps surprisingly, they do it very differently than the vast majority of tech companies. In *INSPIRED*, technology product management thought leader Marty Cagan provides readers with a master class in how to structure and staff a vibrant and successful product organization, and how to discover and deliver technology products that your customers will love—and that will work for your business. With sections on assembling the right people and skillsets, discovering the right product, embracing an effective yet lightweight process, and creating a strong product culture, readers can take the information they learn and immediately leverage it within their own organizations—dramatically improving their own product efforts. Whether you're an early stage startup working to get to product/market fit, or a growth-stage company working to scale your product organization, or a large, long-established company trying to regain your ability to consistently deliver new value for your customers, *INSPIRED* will take you and your product organization to a new level of customer engagement, consistent innovation, and business success. Filled with the author's own personal stories—and profiles of some of today's most-successful product managers and technology-powered product companies, including Adobe, Apple, BBC, Google, Microsoft, and Netflix—*INSPIRED* will show you how to turn up the dial of your own product efforts, creating technology products your customers love. The first edition of *INSPIRED*, published ten years ago, established itself as the primary reference for technology product managers, and can be found on the shelves of nearly every successful technology product company worldwide. This thoroughly updated second edition shares the same objective of being the most valuable resource for technology product managers, yet it is completely new—sharing the latest practices and techniques of today's most-successful tech product companies, and the men and women behind every great product.

Widely considered one of the best practical guides to programming, Steve McConnell's original *CODE COMPLETE* has been helping developers write better software for more than a decade. Now this classic book has been fully updated and revised with leading-edge practices—and hundreds of new code samples—illustrating the art and science of software construction. Capturing the body of knowledge available from research, academia, and everyday commercial practice, McConnell synthesizes the most effective techniques and must-know principles into clear, pragmatic guidance. No matter what your experience level, development environment, or project size, this book will inform and stimulate your thinking—and help you build the highest quality code. Discover the timeless techniques and strategies that help you: Design for minimum complexity and maximum creativity Reap the benefits of collaborative development Apply defensive programming techniques to reduce and flush out errors Exploit opportunities to refactor—or evolve—code, and do it safely Use construction practices that are right-weight for your project Debug problems quickly and effectively Resolve critical construction issues early and correctly Build quality into the beginning, middle, and end of your project

Systems programming provides the foundation for the world's computation. Writing performance-sensitive code requires a programming language that puts programmers in control of how memory, processor time, and other system resources are used. The Rust systems programming language combines that control with a modern type system that catches broad classes of common mistakes, from memory management errors to data races between threads. With this practical guide, experienced systems programmers will learn how to successfully bridge the gap between performance and safety using Rust. Jim Blandy, Jason Orendorff, and Leonora Tindall demonstrate how Rust's features put programmers in control over memory consumption and processor use by combining predictable performance with memory safety and trustworthy concurrency. You'll learn: Rust's fundamental data types and the core concepts of ownership and borrowing How to write flexible, efficient code with traits and generics How to write fast, multithreaded code without data races Rust's key power tools: closures, iterators, and asynchronous programming Collections, strings and text, input and output, macros, unsafe code, and foreign function interfaces This revised, updated edition covers the Rust 2021 Edition.

This is the official guide and reference manual for Subversion 1.6 - the popular open source revision control technology.

ASP in a Nutshell provides the high-quality reference documentation that web application developers really need to create effective Active Server Pages. It focuses on how features are used in a real application and highlights little-known or undocumented features. This book also includes an overview of the interaction between the latest release of Internet Information Server (version 5) and ASP 3.0, with an introduction to the IIS object model and the objects it comprises. The examples shown in this section and throughout the book are illustrated in VBScript. The main components of this book are: Active Server Pages Introduction. Brief overview of the ASP application paradigm with examples in VBScript. Also included is an introduction to Microsoft's Internet Information Server 5.0, the IIS object model, and the objects that it comprises. Object Reference. Each object is discussed in the following manner: descriptions, properties, collections, methods, events, accessory files/required DLLs, and remarks, including real-world uses, tips and tricks, and author's experience (where applicable). The objects--Application, Response, Request, Server, Session, ObjectContext, and ASPError, as well as ASP Directives, Global.ASA, and Server-Side Includes--all follow this paradigm. Component Reference. This section follows the same paradigm found in Object Reference. The discussion covers all of the additional components included with IIS, such as ActiveX Data Objects, the Ad Rotator, the

Browser capabilities component, the File System Object, and more. Appendixes. Gives examples in one or two objects and components using Perl, REXX, and Python in ASP. Like other books in the "In a Nutshell" series this book offers the facts, including critical background information, in a no-nonsense manner that users will refer to again and again. It is a detailed reference that enables even experienced web developers to advance their ASP applications to new levels.

Creating robust software requires the use of efficient algorithms, but programmers seldom think about them until a problem occurs. Algorithms in a Nutshell describes a large number of existing algorithms for solving a variety of problems, and helps you select and implement the right algorithm for your needs -- with just enough math to let you understand and analyze algorithm performance. With its focus on application, rather than theory, this book provides efficient code solutions in several programming languages that you can easily adapt to a specific project. Each major algorithm is presented in the style of a design pattern that includes information to help you understand why and when the algorithm is appropriate. With this book, you will: Solve a particular coding problem or improve on the performance of an existing solution Quickly locate algorithms that relate to the problems you want to solve, and determine why a particular algorithm is the right one to use Get algorithmic solutions in C, C++, Java, and Ruby with implementation tips Learn the expected performance of an algorithm, and the conditions it needs to perform at its best Discover the impact that similar design decisions have on different algorithms Learn advanced data structures to improve the efficiency of algorithms With Algorithms in a Nutshell, you'll learn how to improve the performance of key algorithms essential for the success of your software applications.

Your team will change whether you like it or not. People will come and go. Your company might double in size or even be acquired. In this practical book, author Heidi Helfand shares techniques for reteaming effectively. Engineering leaders will learn how to catalyze team change to reduce the risk of attrition, learning and career stagnation, and the development of knowledge silos. Based on research into well-known software companies, the patterns in this book help CTOs and team managers effectively integrate new hires into an existing team, manage a team that has lost members, or deal with unexpected change. You'll learn how to isolate teams for focused innovation, rotate team members for knowledge sharing, break through organizational apathy, and more. You'll explore: Real-world examples that demonstrate why and how organizations reteam Five reteaming patterns: One by One, Grow and Split, Isolation, Merging, and Switching Tactics to help you master dynamic reteaming in your company Stories that demonstrate problems caused by reteaming anti-patterns

The corporate market is now embracing free, "open source" software like never before, as evidenced by the recent success of the technologies underlying LAMP (Linux, Apache, MySQL, and PHP). Each is the result of a publicly collaborative process among numerous developers who volunteer their time and energy to create better software. The truth is, however, that the overwhelming majority of free software projects fail. To help you beat the odds, O'Reilly has put together Producing Open Source Software, a guide that recommends tried and true steps to help free software developers work together toward a common goal. Not just for developers who are considering starting their own free software project, this book will also help those who want to participate in the process at any level. The book tackles this very complex topic by distilling it down into easily understandable parts. Starting with the basics of project management, it details specific tools used in free software projects, including version control, IRC, bug tracking, and Wikis. Author Karl Fogel, known for his work on CVS and Subversion, offers practical advice on how to set up and use a range of tools in combination with open mailing lists and archives. He also provides several chapters on the essentials of recruiting and motivating developers, as well as how to gain much-needed publicity for your project. While managing a team of enthusiastic developers -- most of whom you've never even met -- can be challenging, it can also be fun. Producing Open Source Software takes this into account, too, as it speaks of the sheer pleasure to be had from working with a motivated team of free software developers. Terraform has become a key player in the DevOps world for defining, launching, and managing infrastructure as code (IaC) across a variety of cloud and virtualization platforms, including AWS, Google Cloud, Azure, and more. This hands-on second edition, expanded and thoroughly updated for Terraform version 0.12 and beyond, shows you the fastest way to get up and running. Gruntwork cofounder Yevgeniy (Jim) Brikman walks you through code examples that demonstrate Terraform's simple, declarative programming language for deploying and managing infrastructure with a few commands. Veteran sysadmins, DevOps engineers, and novice developers will quickly go from Terraform basics to running a full stack that can support a massive amount of traffic and a large team of developers. Explore changes from Terraform 0.9 through 0.12, including backends, workspaces, and first-class expressions Learn how to write production-grade Terraform modules Dive into manual and automated testing for Terraform code Compare Terraform to Chef, Puppet, Ansible, CloudFormation, and Salt Stack Deploy server clusters, load balancers, and databases Use Terraform to manage the state of your infrastructure Create reusable infrastructure with Terraform modules Use advanced Terraform syntax to achieve zero-downtime deployment

Annotation Over the past 10 years, distributed systems have become more fine-grained. From the large multi-million line long monolithic applications, we are now seeing the benefits of smaller self-contained services. Rather than heavy-weight, hard to change Service Oriented Architectures, we are now seeing systems consisting of collaborating microservices. Easier to change, deploy, and if required retire, organizations which are in the right position to take advantage of them are yielding significant benefits. This book takes an holistic view of the things you need to be cognizant of in order to pull this off. It covers just enough understanding of technology, architecture, operations and organization to show you how to move towards finer-grained systems. Get up to speed on Scala, the JVM language that offers all the benefits of a modern object model, functional programming, and an advanced type system. Packed with code examples, this comprehensive book shows you how to be productive with the language and ecosystem right away, and explains why Scala is ideal for today's highly scalable, data-centric applications that support concurrency and distribution. This second edition covers recent language features, with new chapters on pattern matching, comprehensions, and advanced functional programming. You'll also learn about Scala's command-line tools, third-party tools, libraries, and language-aware plugins for editors and IDEs. This book is ideal for beginning and advanced Scala developers alike. Program faster with Scala's succinct and flexible syntax Dive into basic and advanced functional programming (FP) techniques Build killer big-data apps, using Scala's functional combinators Use traits for mixin composition and pattern matching for data extraction Learn the sophisticated type system that combines FP and object-oriented programming concepts Explore Scala-specific concurrency tools, including Akka Understand how to develop rich domain-specific languages Learn good design techniques for building scalable and robust Scala applications

Talking to people about your designs might seem like a basic skill, but it can be difficult to do efficiently and well. And, in many cases, how you communicate about your work with stakeholders, clients, and other non-designers is more critical than the designs themselves—simply because the most articulate person usually wins. This practical guide focuses on principles, tactics, and actionable methods for presenting your designs. Whether you design UX, websites, or products, you'll learn how to win over anyone who has influence over the project—with the goal of creating the best experience for the end user. Walk through the process of preparing for and presenting your designs Understand stakeholder perspectives, and learn how to empathize with them Cultivate both implicit and explicit listening skills Learn tactics and formulas for expressing the most effective response to feedback Discover why the way you follow through is just as crucial as the meeting itself Educate your stakeholders by sharing the chapter from this book on how to work with designers

Release It! Design and Deploy Production-Ready Software Pragmatic Bookshelf

Authored by two of the leading authorities in the field, this guide offers readers the knowledge and skills needed to achieve proficiency with embedded software.

Data is at the center of many challenges in system design today. Difficult issues need to be figured out, such as scalability, consistency, reliability, efficiency, and maintainability. In addition, we have an overwhelming variety of tools, including relational databases, NoSQL datastores, stream or batch processors, and message brokers. What are the right choices for your application? How do you make sense of all these buzzwords? In this practical and comprehensive guide, author Martin Kleppmann helps you navigate this diverse landscape by examining the pros and cons of various technologies for processing and storing data. Software keeps changing, but the fundamental principles remain the same. With this book, software engineers and architects will learn how to apply those ideas in practice, and how to make full use of data in modern applications. Peer under the hood of the systems you already use, and learn how to use and operate them more effectively Make informed decisions by identifying the strengths and weaknesses of different tools Navigate the trade-offs around consistency, scalability, fault tolerance, and complexity Understand the distributed systems research upon which modern databases are built Peek behind the scenes of major online services, and learn from their architectures

A lot of work is required to release an API, but the effort doesn't always pay off. Overplanning before an API matures is a wasted investment, while underplanning can lead to disaster. This practical guide provides maturity models for individual APIs and multi-API landscapes to help you invest the right human and company resources for the right maturity level at the right time. How do you balance the desire for agility and speed with the need for robust and scalable operations? Four experts from the API Academy show software architects, program directors, and product owners how to maximize the value of their APIs by managing them as products through a continuous life cycle. Learn which API decisions you need to govern and how and where to do so Design, deploy, and manage APIs using an API-as-a-product (AaaP) approach Examine ten pillars that form the foundation of API product work Learn how the continuous improvement model governs changes throughout an API's lifetime Explore the five stages of a complete API product life cycle Delve into team roles needed to design, build, and maintain your APIs Learn how to manage your API landscape—the set of APIs published by your organization

A single dramatic software failure can cost a company millions of dollars - but can be avoided with simple changes to design and architecture. This new edition of the best-selling industry standard shows you how to create systems that run longer, with fewer failures, and recover better when bad things happen. New coverage includes DevOps, microservices, and cloud-native architecture. Stability antipatterns have grown to include systemic problems in large-scale systems. This is a must-have pragmatic guide to engineering for production systems. If you're a software developer, and you don't want to get alerts every night for the rest of your life, help is here. With a combination of case studies about huge losses - lost revenue, lost reputation, lost time, lost opportunity - and practical, down-to-earth advice that was all gained through painful experience, this book helps you avoid the pitfalls that cost companies millions of dollars in downtime and reputation. Eighty percent of project life-cycle cost is in production, yet few books address this topic. This updated edition deals with the production of today's systems - larger, more complex, and heavily virtualized - and includes information on chaos engineering, the discipline of applying randomness and deliberate stress to reveal systematic problems. Build systems that survive the real world, avoid downtime, implement zero-downtime upgrades and continuous delivery, and make cloud-native applications resilient. Examine ways to architect, design, and build software - particularly distributed systems - that stands up to the typhoon winds of a flash mob, a Slashdotting, or a link on Reddit. Take a hard look at software that failed the test and find ways to make sure your software survives. To skip the pain and get the experience...get this book.

If you're considering R for statistical computing and data visualization, this book provides a quick and practical guide to just about everything you can do with the open source R language and software environment. You'll learn how to write R functions and use R packages to help you prepare, visualize, and analyze data. Author Joseph Adler illustrates each process with a wealth of examples from medicine, business, and sports. Updated for R 2.14 and 2.15, this second edition includes new and expanded chapters on R performance, the ggplot2 data visualization package, and parallel R computing with Hadoop. Get started quickly with an R tutorial and hundreds of examples Explore R syntax, objects, and other language details Find thousands of user-contributed R packages online, including Bioconductor Learn how to use R to prepare data for analysis Visualize your data with R's graphics, lattice, and ggplot2 packages Use R to calculate statistical tests, fit models, and compute probability distributions Speed up intensive computations by writing parallel R programs for Hadoop Get a complete desktop reference to R

Get up to speed on Git for tracking, branching, merging, and managing code revisions. Through a series of step-by-step tutorials, this practical guide takes you quickly from Git

fundamentals to advanced techniques, and provides friendly yet rigorous advice for navigating the many functions of this open source version control system. This thoroughly revised edition also includes tips for manipulating trees, extended coverage of the reflog and stash, and a complete introduction to the GitHub repository. Git lets you manage code development in a virtually endless variety of ways, once you understand how to harness the system's flexibility. This book shows you how. Learn how to use Git for several real-world development scenarios Gain insight into Git's common-use cases, initial tasks, and basic functions Use the system for both centralized and distributed version control Learn how to manage merges, conflicts, patches, and diffs Apply advanced techniques such as rebasing, hooks, and ways to handle submodules Interact with Subversion (SVN) repositories—including SVN to Git conversions Navigate, use, and contribute to open source projects though GitHub

Twitter is not just for talking about your breakfast anymore. It's become an indispensable communications tool for businesses, non-profits, celebrities, and people around the globe. With the second edition of this friendly, full-color guide, you'll quickly get up to speed not only on standard features, but also on new options and nuanced uses that will help you tweet with confidence. Co-written by two widely recognized Twitter experts, *The Twitter Book* is packed with all-new real-world examples, solid advice, and clear explanations guaranteed to turn you into a power user. Use Twitter to connect with colleagues, customers, family, and friends Stand out on Twitter Avoid common gaffes and pitfalls Build a critical communications channel with Twitter—and use the best third-party tools to manage it. Want to learn how to use Twitter like a pro? Get the book that readers and critics alike rave about.

This second edition of *The Principles of Beautiful Web Design* is the ideal book for people who can build websites, but are seeking the skills and knowledge to visually enhance their sites. This book will teach you how to: Understand the process of what makes "good design," from discovery through to implementation Use color effectively, develop color schemes, and create a palette Create pleasing layouts using grids, the rule of thirds, and symmetry Employ textures: lines, points, shapes, volumes, and depth Apply typography to make ordinary designs look great Choose, edit, and position effective imagery And lots more... This revised, easy-to-follow guide is illustrated with beautiful, full-color examples, and leads readers through the process of creating great designs from start to finish. It also features: Updated information about grid-based design How to design for mobile resolutions Information about the future of web fonts including @font-face Common user-interface patterns and resources

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

Processing opened up the world of programming to artists, designers, educators, and beginners. The *Processing.py* Python implementation of Processing reinterprets it for today's web. This short book gently introduces the core concepts of computer programming and working with Processing. Written by the co-founders of the Processing project, Reas and Fry, along with co-author Allison Parrish, *Getting Started with Processing.py* is your fast track to using Python's Processing mode.

Using research in neurobiology, cognitive science and learning theory, this text loads patterns into your brain in a way that lets you put them to work immediately, makes you better at solving software design problems, and improves your ability to speak the language of patterns with others on your team.

This best-selling book, designed for researchers embarking on their first ethnographic project, has been substantially revised and updated, with lots of exercises and advice to guide the embodied and creative 'practice' of ethnography. New additions include cyber-ethnography, sensual, visual and mobile ethnographies, and 'field walking'.

[Copyright: f3259d989b227cdab842786ad202c936](https://www.pdfdrive.com/f3259d989b227cdab842786ad202c936.html)