Managing Projects With Gnu Make The Power Of Gnu Make For Building Anything Nutshell Handbooks

The process of user-centered innovation: how it can benefit both users and manufacturers and how its emergence will bring changes in business models and in public policy. Innovation is rapidly becoming democratized. Users, aided by improvements in computer and communications technology, increasingly can develop their own new products and services. These innovating users—both individuals and firms—often freely share their innovations with others, creating user-innovation communities and a rich intellectual commons. In Democratizing Innovation, Eric von Hippel looks closely at this emerging system of user-centered innovation. He explains why and when users find it profitable to develop new products and services for themselves, and why it often pays users to reveal their innovations freely for the use of all.The trend toward democratized innovation can be seen in software and information products—most notably in the free and open-source software movement—but also in physical products. Von Hippel's many examples of user innovation in action range from surgical equipment to surfboards to software security features. He shows that product and service development is concentrated among "lead users," who are ahead on marketplace trends and whose innovations are often commercially attractive. Von Hippel argues that manufacturers should redesign their innovation processes and that they should systematically seek out innovations developed by users. He points to businesses—the custom semiconductor industry is one example—that have learned to assist user-innovators by providing them with toolkits for developing new products. User innovation has a positive impact on social welfare, and von Hippel proposes that government policies, including R&D subsidies and tax credits, should be realigned to eliminate biases against it. The goal of a democratized user-centered innovation system, says von Hippel, is well worth striving for. An electronic version of this book is available under a Creative Commons license.

The command-line interface is making a comeback. That's because developers know that all the best features of your operating system are hidden behind a user interface designed to help average people use the computer. But you're not the average user, and the CLI is the most efficient way to get work done fast. Turn tedious chores into quick tasks: read and write files, manage complex directory hierarchies, perform network diagnostics, download files, work with APIs, and combine individual programs to create your own workflows. Put down that mouse, open the CLI, and take control of your software development environment. No matter what language or platform you're using, you can use the CLI to create projects, run servers, and manage files. You can even create new tools that fit right in with grep, sed, awk, and xargs. You'll work with the Bash shell and the most common command-line utilities available on macOS, Windows 10, and many flavors of Linux. Create files without opening a text editor. Manage complex directory strutures and move around your entire file system without touching the mouse. Diagnose network issues and interact with APIs. Chain several commands together to transform data, and create your own scripts to automate repetitive tasks. Make things even faster by customizing your environment, creating shortcuts, and integrating other tools into your environment. Hands-on activities and exercises will cement your newfound knowledge and give you the confidence to use the CLI to its fullest potential. And if you're worried you'll wreck your system, this book walks you through creating an Ubuntu virtual machine so you can practice worry-free. Dive into the CLI and join the thousands of other devs who use it every day. What You Need: You'll need macOS, Windows 10, or a Linux distribution like Ubuntu, Fedora, CentOS, or Debian using the Bash shell.

Here is a complete package for programmers who are new to UNIX or who would like to make better use of the system. The book provides an introduction to all the tools needed for a C programmer. The CD contains sources and binaries for the most popular GNU tools, including their C/C++ compiler.

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.

Making Java Groovy

A Guide to Building Programs on DOS, OS/2, and UNIX Systems

Make: Electronics

A Program for Directing Recompilation : GNU Make Version 3.79.1

Configuring, Using, and Maintaining a Complete Programming Environment

A Practitioner's Guide to GNU Autoconf, Automake, and Libtool

Designed for the way many developers work, this practical problem-solving guide balances the need for rapid development with a trusted source of information.

Two leading Linux developers show how to choose the best tools for your specific needs and integrate them into a complete development environment that maximizes your effectiveness in any project, no matter how large or complex. Includes research, requirements, coding, debugging, deployment, maintenance and beyond, choosing and implementing editors, compilers, assemblers, debuggers, version control systems, utilities, using Linux Standard Base to deliver applications that run reliably on a wide range of Linux systems, comparing Java development options for Linux platforms, using Linux in cross-platform and embedded development environments.

O'Reilly's bestselling book on Linux's bash shell is at it again. Now that Linux is an established player both as a server and on the desktop Learning the bash Shell has been updated and refreshed to account for all the

latest changes. Indeed, this third edition serves as the most valuable guide yet to the bash shell.As any good programmer knows, the first thing users of the Linux operating system come face to face with is the shell the UNIX term for a user interface to the system. In other words, it's what lets you communicate with the computer via the keyboard and display. Mastering the bash shell might sound fairly simple but it isn't. In truth, there are many complexities that need careful explanation, which is just what Learning the bash Shell provides.If you are new to shell programming, the book provides an excellent introduction, covering everything from the most basic to the most advanced features. And if you've been writing shell scripts for years, it offers a great way to find out what the new shell offers. Learning the bash Shell is also full of practical examples of shell commands and programs that will make everyday use of Linux that much easier. With this book, programmers will learn: How to install bash as your login shell The basics of interactive shell use, including UNIX file and directory structures, standard I/O, and background jobs Command line editing, history substitution, and key bindings How to customize your shell environment without programming The nuts and bolts of basic shell programming, flow control structures, command-line options and typed variables Process handling, from job control to processes, coroutines and subshells Debugging techniques, such as trace and verbose modes Techniques for implementing system-wide shell customization and features related to system security

Essay Collection covering the point where software, law and social justice meet.

The Definitive Guide to GCC

Learning the bash Shell

Managing Projects with GNU Make

Unix for the Practical Paranoid

Effective C

The GNU Make Book

Summary Making Java Groovy is a practical handbook for developers who want to blend Groovy into their day-to-day work with Java. It starts by introducing the key differences between Java and Groovy—and how you can use them to your advantage. Then, it guides you step-by-step through realistic development challenges, from web applications to web services to desktop applications, and shows how Groovy makes them easier to put into production. About this Book You don't need the full force of Java when you're writing a build script, a simple system utility, or a lightweight web app—but that's where Groovy shines brightest. This elegant JVM-based dynamic language extends and simplifies Java so you can concentrate on the task at hand instead of managing minute details and unnecessary complexity. Making Java Groov is a practical guide for developers who want to benefit from Groovy in their work with Java. It starts by introducing the key differences between Java and Groovy and how to use them to your advantage. Then, you'll focus on the situations you face every day, like consuming and creating RESTful web services, working with databases, and using the Spring framework. You'll also explore the great Groovy tools for build processes, testing, and deployment and learn how to write Groovy-based domain-specific languages that simplify Java development. Written for developers familiar with Java. No Groovy experience required. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. What's Inside Easier Java Closures, builders, and metaprogramming Gradle for builds, Spock for testing Groovy frameworks like Grails and Griffon About the Author Ken Kousen is an independent consultant and trainer specializing in Spring, Hibernate, Groovy, and Grails. Table of Contents PART 1: UP TO SPEED WITH GROOVY Why add Groovy to Java? Groovy by example Code-level integration Using Groovy features in Java PART 2: GROOVY TOOLS Build processes Testing Groovy and Java projects PART 3: GROOVY IN THE REAL WORLD The Spring framework Database access RESTful web services Building and testing web applications The GNU Autotools make it easy for developers to create software that is portable across many UNIX-like operating systems. Thousands of open source software packages use the Autotools, but the learning curve is unfortunately steep, and it can be difficult for a beginner to find anything more than basic reference material on using the powerful software suite. InAutotools, author John Calcote begins with an overview of high-level concepts; then tackles more advanced topics, like using the M4 macro processor with Autoconf, extending the Automake framework, and building Java and C# sources. You'll learn how to: Master the Autotools build system to maximize your software's portability Generate Autoconf configuration scripts to simplify the compilation process Produce portable makefiles with Automake Build cross-platform software libraries with Libtool Write your own Autoconf macros Autotoolsalso includes a variety of complete projects that you're encouraged to work through to gain a real-world sense of how to become an Autotools practitioner. For example, you'll turn the FLAIM and Jupiter projects' hand-coded, makefile-based build systems into a powerful Autotools-based build system. UNIX: The Textbook, Third Edition provides a comprehensive introduction to the modern, twenty-first-century UNIX operating system. The book deploys PC-BSD and Solaris, representative systems of the major branches of the UNIX family, to illustrate the key concepts. It covers many topics not covered in older, more traditional textbook approaches, such as Python, UNIX System Programming from basics to socket-based network programming using the client-server paradigm, the Zettabyte File System (ZFS), and the highly developed X Windows-based KDE and Gnome GUI desktop environments. The third edition has been fully updated and expanded, with extensive revisions throughout. It features a new tutorial chapter on the Python programming language and its use in UNIX, as well as a complete tutorial on the git command with Github. It includes four new chapters on UNIX system programming and the UNIX API, which describe the use of the UNIX system call interface for file processing, process management, signal handling, interprocess communication (using pipes, FIFOs, and sockets), extensive coverage of internetworking with UNIX TCP/IP using the client-server software, and considerations for the design and implementation of production-quality client-server software using iterative and concurrent servers. It also includes new chapters on UNIX system administration, ZFS, and container virtualization methodologies using iocage, Solaris Jails, and VirtualBox. Utilizing the authors' almost 65 years of practical teaching experience at the college level, this textbook presents well-thought-out sequencing of old and new topics, well-developed and timely lessons, a Github site containing all of the code in the book plus exercise solutions, and homework exercises/problems synchronized with the didactic sequencing of chapters in the book. With the exception of four chapters on system programming, the book can be used very successfully by a complete novice, as well as by an experienced UNIX system user, in both an informal and

formal learning environment. The book may be used in several computer science and information technology courses, including UNIX for beginners and advanced users, shell and Python scripting, UNIX system programming, UNIX network programming, and UNIX system administration. It may also be used as a companion to the undergraduate and graduate level courses on operating system concepts and principles.
Besides covering the most recently released versions of GCC, this book provides a complete command reference, explains how to use the info online help system, and covers material not covered in other texts, including profiling, test coverage, and how to build and install GCC on a variety of operating system and hardware platforms. It also covers how to integrate with other GNU development tools, including automake, autoconf, and libtool.
Maximum RPM
Autotools
Programming Embedded Systems

vi Editor Pocket Reference
Modern Systems and Practices
"This is teaching at its best!" --Hans Camenzind, inventor of the 555 timer (the world's most successful integrated circuit), and author of Much Ado About Almost Nothing: Man's Encounter with the Electron (Booklocker.com) "A fabulous book: well written, well paced, fun, and informative. I also love the sense of humor. It's very good at disarming the fear. And it's gorgeous. I'll be recommending this book highly." --Tom Igoe, author of Physical Computing and Making Things Talk Want to learn the fundamentals of electronics in a fun, hands-on way? With Make: Electronics, you'll start working on real projects as soon as you crack open the book. Explore all of the key components and essential principles through a series of fascinating experiments. You'll build the circuits first, then learn the theory behind them! Build working devices, from simple to complex You'll start with the basics and then move on to more complicated projects. Go from switching circuits to integrated circuits, and from simple alarms to programmable microcontrollers. Step-by-step instructions and more than 500 full-color photographs and illustrations will help you use -- and understand -- electronics concepts and techniques. Discover by breaking things: experiment with components and learn from failure Set up a tricked-out project space: make a work area at home, equipped with the tools and parts you'll need Learn about key electronic components and their functions within a circuit Create an intrusion alarm, holiday lights, wearable electronic jewelry, audio processors, a reflex tester, and a combination lock Build an autonomous robot cart that can sense its environment and avoid obstacles Get clear, easy-to-understand explanations of what you're doing and why
The complete reference for the RPM software package that is the heart of the Red Hat Linux distribution. Designed for both the novice and advanced users, Maximum RPM enables anyone to take full advantage of the benefits of building software packages with the Red Hat Package management tools to ensure that they install simply and accurately each and every time.
Provides an introduction to the GNU C and C++ compilers, gcc and g++. This manual includes: compiling C and C++ programs using header files and libraries, warning options, use of the preprocessor, static and dynamic linking, optimization, platform-specific options, profiling and coverage testing, paths and environment variables, and more.
The utility simply known as make is one of the most enduring features of both Unix and other operating systems. First invented in the 1970s, make still turns up to this day as the central engine in most programming projects; it even builds the Linux kernel. In the third edition of the classic Managing Projects with GNU make, readers will learn why this utility continues to hold its top position in project build software, despite many younger competitors. The premise behind make is simple: after you change source files and want to rebuild your program or other output files, make checks timestamps to see what has changed and rebuilds just what you need, without wasting time rebuilding other files. But on top of this simple principle, make layers a rich collection of options that lets you manipulate multiple directories, build different versions of programs for different platforms, and customize your builds in other ways. This edition focuses on the GNU version of make, which has deservedly become the industry standard. GNU make contains powerful extensions that are explored in this book. It is also popular because it is free software and provides a version for almost every platform, including a version for Microsoft Windows as part of the free Cygwin project. Managing Projects with GNU make, 3rd Edition provides guidelines on meeting the needs of large, modern projects. Also added are a number of interesting advanced topics such as portability, parallelism, and use with Java. Robert Mecklenburg, author of the third edition, has used make for decades with a variety of platforms and languages. In this book he zealously lays forth how to get your builds to be as efficient as possible, reduce maintenance, avoid errors, and thoroughly understand what make is doing. Chapters on C++ and Java provide makefile entries optimized for projects in those languages. The author even includes a discussion of the makefile used to build the book.

The Art of UNIX Programming
Advanced Linux Programming
UNIX
Time Management for Mortals
CMake Cookbook
Absolute OpenBSD, 2nd Edition

This is the eBook version of the printed book. If the print book includes a CD-ROM, this content is not included within the eBook version. Advanced Linux Programming is divided into two parts. The first covers generic UNIX system services, but with a particular eye towards Linux specific information. This portion of the book will be of use even to advanced programmers who have worked with other Linux systems since it will cover Linux specific details and differences. For programmers without UNIX experience, it will be even more valuable. The second section covers material that is entirely Linux specific. These are truly advanced topics, and are the techniques that the gurus use to build great applications. While this book will focus mostly on the Application Programming Interface (API) provided by the Linux kernel and the C library, a preliminary introduction to the development tools available will allow all who purchase the book to make immediate use of Linux.

Using csh & tcsh describes from the beginning how to use csh--the standard shell on most UNIX systems--interactively. More importantly, it shows the reader how to get work done faster with less typing.

This updated reference offers a clear description of make, a central engine in many programming projects that simplifies the process of re-linking a program after re-compiling source files. Original. (Intermediate)

The Art of UNIX Programming poses the belief that understanding the unwritten UNIX engineering tradition and mastering its design patterns will help programmers of all stripes to become better programmers. This book attempts to capture the engineering wisdom and design philosophy of the UNIX, Linux, and Open Source software development community as it has evolved over the past three decades, and as it is applied today by the most experienced programmers. Eric Raymond offers the next generation of "hackers" the unique opportunity to learn the connection between UNIX philosophy and practice through careful case studies of the very best UNIX/Linux programs.

The Power of GNU Make for Building Anything
Managing Projects with GNU Make, 3rd Edition
Unix Power Tools
Linux Programming Bible
The Textbook, Third Edition
Building, testing, and packaging modular software with modern CMake

Many Linux and Unix developers are familiar with the GNU debugger (GBD), the invaluable open source tool for testing, fixing, and retesting software. And since GDB can be ported to Windows, Microsoft developers and others who use this platform can also take advantage of this amazing free software that allows you to see exactly what's going on inside of a program as it's executing. This new pocket guide gives you a convenient quick reference for using the debugger with several different programming languages, including C, C++, Java, Fortran and Assembly. The GNU debugger is the most useful tool during the testing phase of the software development cycle because it helps you catch bugs in the act. You can see what a program was doing at the moment it crashed, and then readily pinpoint and correct problem code. With the GDB Pocket Reference on hand, the process is quick and painless. The book covers the essentials of using GBD is a testing environment, including how to specify a target for debugging and how to make a program stop on specified conditions. This handy guide also provides details on using the debugger to examine the stack, source files and data to find the cause of program failure-and then explains ways to use GBD to make quick changes to the program for further testing and debugging. The ability to spot a bug in real time with GDB can save you hours of frustration, and having a quick way to refer to GBD's essential functions is key to making the process work. Once you get your hands on the GDB Pocket Reference, you'll never let go!

The Linux Programming Bible is the definitive reference for beginning and veteran Linux programmers. Written by John Goerzen, a developer for the Debian GNU/Linux Distribution, this comprehensive guide leads you step by step from simple shell programs to sophisticated CGI applications. You'll find complete coverage of Linux programming, including: Techniques for C/C++, Perl, CGI, and shell programming Basic tools, such as bash, regular expression, sed, grep, Emacs, and more Communication using semaphores, pipelines, FIFOs, and TCP/IP Practical tips on CVS collaboration security, and performance optimization Linux C tools, including compilers, libraries, and debuggers Filled with savvy programming advice and clear code examples, the Linux Programming Bible is all you need to take your Linux programming skills to the next level.

The utility simply known as make is one of the most enduring features of both Unix and other operating systems. First invented in the 1970s, make still turns up to this day as the central engine in most programming projects; it even builds the Linux kernel. In the third edition of the classic Managing Projects with GNU make, readers will learn why this utility continues to hold its top position in project build software, despite many younger competitors.The premise behind make is simple:

after you change source files and want to rebuild your program or other output files, make checks timestamps to see what has changed and rebuilds just what you need, without wasting time rebuilding other files. But on top of this simple principle, make layers a rich collection of options that lets you manipulate multiple directories, build different versions of programs for different platforms, and customize your builds in other ways.This edition focuses on the GNU version of make, which has deservedly become the industry standard. GNU make contains powerful extensions that are explored in this book. It is also popular because it is free software and provides a version for almost every platform, including a version for Microsoft Windows as part of the free Cygwin project. Managing Projects with GNU make, 3rd Edition provides guidelines on meeting the needs of large, modern projects. Also added are a number of interesting advanced topics such as portability, parallelism, and use with Java.Robert Mecklenburg, author of the third edition, has used make for decades with a variety of platforms and languages. In this book he zealously lays forth how to get your builds to be as efficient as possible, reduce maintenance, avoid errors, and thoroughly understand what make is doing. Chapters on C++ and Java provide makefile entries optimized for projects in those languages. The author even includes a discussion of the makefile used to build the book.
Software -- Operating Systems.
GDB Pocket Reference
Beginning Git and GitHub
Linux in a Nutshell
A POSIX Standard for Better Multiprocessing
An Introduction to GCC
Selected Essays of Richard M. Stallman

Managing Projects with GNU Make"O'Reilly Media, Inc."

Another day without Test-Driven Development means more time wasted chasing bugs and watching your code deteriorate. You thought TDD was for someone else, but it's not! It's for you, the embedded C programmer. TDD helps you prevent defects and build software with a long useful life. This is the first book to teach the hows and whys of TDD for C programmers. TDD is a modern programming practice C developers need to know. It's a different way to program---unit tests are written in a tight feedback loop with the production code, assuring your code does what you think. You get valuable feedback every few minutes. You find mistakes before they become bugs. You get early warning of design problems. You get immediate notification of side effect defects. You get to spend more time adding valuable features to your product. James is one of the few experts in applying TDD to embedded C. With his 1.5 decades of training,coaching, and practicing TDD in C, C++, Java, and C# he will lead you from being a novice in TDD to using the techniques that few have mastered. This book is full of code written for embedded C programmers. You don't just see the end product, you see code and tests evolve. James leads you through the thought process and decisions made each step of the way. You'll learn techniques for test-driving code right nextto the hardware, and you'll learn design principles and how to apply them to C to keep your code clean and flexible. To run the examples in this book, you will need a C/C++ development environment on your machine, and the GNU GCC tool chain or Microsoft Visual Studio for C++ (some project conversion may be needed).

OpenBSD, the elegant, highly secure Unix-like operating system, is widely used as the basis for critical DNS servers, routers, firewalls, and more. This long-awaited second edition of Absolute OpenBSD maintains author Michael Lucas's trademark straightforward and practical approach that readers have enjoyed for years. You'll learn the intricacies of the platform, the technical details behind certain design decisions, and best practices, with bits of humor sprinkled throughout. This edition has been completely updated for OpenBSD 5.3, including new coverage of OpenBSD's boot system, security features like W^X and ProPolice, and advanced networking techniques. You'll learn how to: –Manage network traffic with VLANs, trunks, IPv6, and the PF packet filter –Make software management quick and effective using the ports and packages system –Give users only the access they need with groups, sudo, and chroots –Configure OpenBSD's secure implementations of SNMP, DHCP, NTP, hardware sensors, and more –Customize the installation and upgrade processes for your network and hardware, or build a custom OpenBSD release Whether you're a new user looking for a complete introduction to OpenBSD or an experienced sysadmin looking for a refresher, Absolute OpenBSD, 2nd Edition will give you everything you need to master the intricacies of the world's most secure operating system.

A detailed introduction to the C programming language for experienced programmers. The world runs on code written in the C programming language, yet most schools begin the curriculum with Python or Java. Effective C bridges this gap and brings C into the modern era--covering the modern C17 Standard as well as potential C2x features. With the aid of this instant classic, you'll soon be writing professional, portable, and secure C programs to power robust systems and solve real-world problems. Robert C. Seacord introduces C and the C Standard Library while addressing best practices, common errors, and open debates in the C community. Developed together with other C Standards committee experts, Effective C will teach you how to debug, test, and analyze C programs. You'll benefit from Seacord's concise explanations of C language constructs and behaviors, and from his 40 years of coding experience. You'll learn: • How to identify and handle undefined behavior in a C program • The range and representations of integers and floating-point values • How dynamic memory allocation works and how to use nonstandard functions • How to use character encodings and types • How to perform I/O with terminals and filesystems using C Standard streams and POSIX file descriptors • How to understand the C compiler's translation phases and the role of the preprocessor • How to test,

debug, and analyze C programs Effective C will teach you how to write professional, secure, and portable C code that will stand the test of time and help strengthen the foundation of the computing world.
For the GNU Compilers Gcc and G++
21st Century C
Learning Through Discovery
Four Thousand Weeks
GNU Make
Managing Projects with Make

"Covers GNU Make basics through advanced topics, including: user-defined functions, macros, and path handling; creating makefile assertions and debugging makefiles; parallelization; automatic dependency generation, rebuilding targets, and non-recursive Make; and using the GNU Make Standard Library"--

High Performance Computing: Modern Systems and Practices is a fully comprehensive and easily accessible treatment of high performance computing, covering fundamental concepts and essential knowledge while also providing key skills training. With this book, domain scientists will learn how to use supercomputers as a key tool in their quest for new knowledge. In addition, practicing engineers will discover how supercomputers can employ HPC systems and methods to the design and simulation of innovative products, and students will begin their careers with an understanding of possible directions for future research and development in HPC. Those who maintain and administer commodity clusters will find this textbook provides essential coverage of not only what HPC systems do, but how they are used. Covers enabling technologies, system architectures and operating systems, parallel programming languages and algorithms, scientific visualization, correctness and performance debugging tools and methods, GPU accelerators and big data problems Provides numerous examples that explore the basics of supercomputing, while also providing practical training in the real use of high-end computers Helps users with informative and practical examples that build knowledge and skills through incremental steps Features sidebars of background and context to present a live history and culture of this unique field Includes online resources, such as recorded lectures from the authors' HPC courses

Learn CMake through a series of task-based recipes that provide you with practical, simple, and ready-to-use CMake solutions for your code Key FeaturesLearn to configure, build, test, and package software written in C, C++, and FortranProgress from simple to advanced tasks with examples tested on Linux, macOS, and WindowsManage code complexity and library dependencies with reusable CMake building blocksBook Description CMake is cross-platform, open-source software for managing the build process in a portable fashion. This book features a collection of recipes and building blocks with tips and techniques for working with CMake, CTest, CPack, and CDash. CMake Cookbook includes real-world examples in the form of recipes that cover different ways to structure, configure, build, and test small- to large-scale code projects. You will learn to use CMake's command-line tools and master modern CMake practices for configuring, building, and testing binaries and libraries. With this book, you will be able to work with external libraries and structure your own projects in a modular and reusable way. You will be well-equipped to generate native build scripts for Linux, MacOS, and Windows, simplify and refactor projects using CMake, and port projects to CMake. What you will learnConfigure, build, test, and install code projects using CMakeDetect operating systems, processors, libraries, files, and programs for conditional compilationIncrease the portability of your codeRefactor a large codebase into modules with the help of CMakeBuild multi-language projectsKnow where and how to tweak CMake configuration files written by somebody elsePackage projects for distributionPort projects to CMakeWho this book is for If you are a software developer keen to manage build systems using CMake or would like to understand and modify CMake code written by others, this book is for you. A basic knowledge of C++, C, or Fortran is required to understand the topics covered in this book.

In this book, realistic examples show both the situations where threading is valuable and the ways to use threads to improve the modularity and efficiency of a program. The author takes the user behind the scenes to show them how threads work, where to expect problems, and what performance issues exist. Chapters on DCE, real-time, and multiprocessing are included.

C++ Cookbook
C Tips from the New School
Small, Sharp Software Tools
Test Driven Development for Embedded C
Democratizing Innovation
High Performance Computing

For many users, working in the UNIX environment means using vi, a full-screen text editor available on most UNIX systems. Even those who know vi often make use of only a small number of its features.The vi Editor Pocket Reference is a companion volume to O'Reilly's updated sixth edition of Learning the vi Editor, a complete guide to text editing with vi. New topics in Learning the vi Editor include multi-screen editing and coverage of four vi clones: vim,elvis, nvi, and vile.This small book is a handy reference guide to the information in the larger volume, presenting movement and editing commands, the command-line options, and other elements of the vi editor in an easy-to-use tabular format.

Learn the fundamentals of version control through step-by-step tutorials that will teach you the ins-and-outs of Git. This book is your complete guide to how Git and GitHub work in a professional team environment. Divided into three parts - Version Control, Project Management and Teamwork - this book

reveals what waits for you in the real world and how to resolve the problems you may run into. Once past the basics of Git, you'll see how to manage a software project, and finally how to utilize Git and GithHub to work effectively as a team. You'll examine how to plan, follow and execute a project with GitHub, and then apply those concepts to real-world situations. Workaround the pitfalls that most programmers fall into when driving a project with Git by using proven tactics to avoid them. You will also be taught the easiest and quickest ways to resolve merge conflicts. A lot of modern books on Git don’t go into depth about non-technical topics. Beginning Git and GitHub will help you cover all the bases right at the start of your career. What You'll Learn Review basic and advanced concepts of GitApply Project Management skills using GitHub Solve conflicts or, ideally, avoid them altogetherUse advanced concepts for a more boosted workflow Who This book Is For New developers, developers that have never worked in a team environment before, developers with basic knowledge of Git or GitHub, or anyone who works with text documents.

AN INSTANT NEW YORK TIMES BESTSELLER "Provocative and appealing . . . well worth your extremely limited time." —Barbara Spindel, The Wall Street Journal The average human lifespan is absurdly, insultingly brief. Assuming you live to be eighty, you have just over four thousand weeks. Nobody needs telling there isn’t enough time. We’re obsessed with our lengthening to-do lists, our overfilled inboxes, work-life balance, and the ceaseless battle against distraction; and we’re deluged with advice on becoming more productive and efficient, and “life hacks” to optimize our days. But such techniques often end up making things worse. The sense of anxious hurry grows more intense, and still the most meaningful parts of life seem to lie just beyond the horizon. Still, we rarely make the connection between our daily struggles with time and the ultimate time management problem: the challenge of how best to use our four thousand weeks. Drawing on the insights of both ancient and contemporary philosophers, psychologists, and spiritual teachers, Oliver Burkeman delivers an entertaining, humorous, practical, and ultimately profound guide to time and time management. Rejecting the futile modern fixation on “getting everything done,” Four Thousand Weeks introduces readers to tools for constructing a meaningful life by embracing finitude, showing how many of the unhelpful ways we’ve come to think about time aren’t inescapable, unchanging truths, but choices we’ve made as individuals and as a society—and that we could do things differently.

By its very nature, Unix is a " power tools " environment. Even beginning Unix users quickly grasp that immense power exists in shell programming, aliases and history mechanisms, and various editing tools. Nonetheless, few users ever really master the power available to them with Unix. There is just too much to learn! Unix Power Tools, Third Edition, literally contains thousands of tips, scripts, and techniques that make using Unix easier, more effective, and even more fun. This book is organized into hundreds of short articles with plenty of references to other sections that keep you flipping from new article to new article. You'll find the book hard to put down as you uncover one interesting tip after another. With the growing popularity of Linux and the advent of Mac OS X, Unix has metamorphosed into something new and exciting. With Unix no longer perceived as a difficult operating system, more and more users are discovering its advantages for the first time. The latest edition of this best-selling favorite is loaded with advice about almost every aspect of Unix, covering all the new technologies that users need to know. In addition to vital information on Linux, Mac OS X, and BSD, Unix Power Tools, Third Edition, now offers more coverage of bcash, zsh, and new shells, along with discussions about modern utilities and applications. Several sections focus on security and Internet access, and there is a new chapter on access to Unix from Windows, addressing the heterogeneous nature of systems today. You'll also find expanded coverage of software installation and packaging, as well as basic information on Perl and Python. The book's accompanying web site provides some of the best software available to Unix users, which you can download and add to your own set of power tools. Whether you are a newcomer or a Unix power user, you'll find yourself thumbing through the gold mine of information in this new edition of Unix Power Tools to add to your store of knowledge. Want to try something new? Check this book first, and you're sure to find a tip or trick that will prevent you from learning things the hard way.

With C and GNU Development Tools

Unix Shell Programming

A Comprehensive Guide to Version Control, Project Management, and Teamwork for the New Developer

The Linux Development Platform

Mastering MAKE

Free Software, Free Society

Throw out your old ideas of C, and relearn a programming language that’s substantially outgrown its origins. With 21st Century C, you’ll discover up-to-date techniques that are absent from every other C text available. C isn’t just the foundation of modern programming languages, it is a modern language, ideal for writing efficient, state-of-the-art applications. Learn to dump old habits that made sense on mainframes, and pick up the tools you need to use this evolved and aggressively simple language. No matter what programming language you currently champion, you’ll agree that C rocks. Set up a C programming environment with shell facilities, makefiles, text editors, debuggers, and memory checkers Use Autotools, C’s de facto cross-platform package manager Learn which older C concepts should be downplayed or deprecated Explore problematic C concepts that are too useful to throw out Solve C’s string-building problems with C-standard and POSIX-standard functions Use modern syntactic features for functions that take structured inputs Build high-level object-based libraries and programs Apply existing C libraries for doing advanced math, talking to Internet servers, and running databases

A practical introduction to MAKE, this comprehensive tutorial shows programmers how to exploit the full power of this valuable utility. Whether you are programming in a DOS, or OS/2, or UNIX system environment, this guide explains in logical, easy-to-follow steps how MAKE works and shows how to use it in a variety of applications. Key features: combines elements of both a tutorial and a reference book, assuming little or no experience with the MAKE command; explains how to create GUI applications using MAKE on X Windows, Presentation Manager, and Windows; offers numerous examples of tested, flexible, and easy-to-use MAKEFILES that you can apply to your own software development projects; helps you avoid the unproductive process of learning MAKE by trial and error; and examines the specifics of popular versions of MAKE, including Microsoft's NMAKE, Borland's MAKE, and MAKE for UNIX Systems.

Over the last few years, Linux has grown both as an operating system and a tool for personal and business use. Simultaneously becoming more user friendly and more powerful as a back-end system, Linux has achieved new plateaus: the newer filesystems have solidified, new commands and tools have appeared and become standard, and the desktop--including new desktop environments--have proved to be viable, stable, and readily accessible to even those who don't consider themselves computer gurus. Whether you're using Linux for personal software projects, for a small office or home office (often termed the SOHO environment), to provide services to a small group of colleagues, or to administer a site responsible for millions of email and web connections each day, you need quick access to information on a wide range of tools. This book covers all aspects of administering and making effective use of Linux systems. Among its topics are booting, package management, and revision control. But foremost in Linux in a Nutshell are the utilities and commands that make Linux one of the most powerful and flexible systems available. Now in its fifth edition, Linux in a Nutshell brings users up-to-date with the current state of Linux. Considered by many to be the most complete and authoritative command reference for Linux available, the book covers all substantial user, programming, administration, and networking commands for the most common Linux distributions. Comprehensive but concise, the fifth edition has been updated to cover new features of major Linux distributions. Configuration information for the rapidly growing commercial network services and community update services is one of the subjects covered for the first time. But that's just the beginning. The book covers editors, shells, and LILO and GRUB boot options. There's also coverage of Apache, Samba, Postfix, sendmail, CVS, Subversion, Emacs, vi, sed, gawk, and much more. Everything that system administrators, developers, and power users need to know about Linux is referenced here, and they will turn to this book again and again.

An Introduction to Professional C Programming

Using Csh & Tcsh

Harness the Combinatoric Power of Command-Line Tools and Utilities

Programming with GNU Software

PThreads Programming