

Download Ebook Opencv Computer Vision Application Programming Cookbook 2nd Edition Raw Free Download Pdf

C# Programming Cookbook Mar 09 2021 Quick fixes to your common C# programming problems, with a focus on C# 6.0 About This Book Unique recipes for C#, that places it in its real-world context. You will be able to get yourself out of any coding-corner you've backed yourself into. All code samples available through GitHub to bring C#. In line with modern development workflows, written to the latest specification of C# 6.0. Who This Book Is For The book is aimed at developers who have basic familiarity with C# programming and will know the VS 2015 environment. What You Will Learn Write better and less code to achieve the same result as in previous versions of C#. Generate tests from the Code Contracts for mission critical methods. Integrate code in Visual Studio with GitHub. Create a web application in Azure. Design and build a microservice architecture Demystify the Rx library using Reactive extensions Write high performing codes in C# and understanding multi-threading. Security and Debugging. Implement Code Contracts on code in Visual Studio. In Detail During your application development workflow, there is always a moment when you need to get out of a tight spot. Through a recipe-based approach, this book will help you overcome common programming problems and get your applications ready to face the modern world. We start with C# 6, giving you hands-on experience with the new language features. Next, we work through the tasks that you perform on a daily basis such as working with strings, generics, and lots more. Gradually, we move on to more advanced topics such as the concept of object-oriented programming, asynchronous programming, reactive extensions, and code contracts. You will learn responsive high performance programming in C# and how to create applications with Azure. Next, we will review the choices available when choosing a source control solution. At the end of the book, we will show you how to create secure and robust code, and will help you ramp up your skills when using the new version of C# 6 and Visual Studio Style and Approach Unique recipe-based guide that will help you gain a solid understanding of the new concepts in C# 6 and Visual Studio Enterprise 2015 in a concise and technically correct manner.

Android Application Development Cookbook Nov 28 2022 A must-have collection of ready-to-use Android recipes! The popularity of Google Android devices is seemingly unstoppable and the Android 4 release offers, for the first time, a single OS solution for building both phone and tablet applications. With that exciting information in mind, veteran author Wei-Meng Lee presents you with 100 unique recipes that you can apply today in order to discover solutions to some of the most commonly encountered problems that exist in Android programming. Covering the scope of multiple Android releases up through Android 4, this reference features a task description, followed by the solution(s) available, and a standalone project file that illustrates the use of the recipe. Formatting each recipe to be standalone, Wei-Meng Lee allows you to jump into the relevant recipe to find a solution to specific challenges. Identifies and describes a programming task, provides a step-by-step solution, and presents a full-code solution ready for download Covers multiple Android releases Addresses such topics as user interfaces, telephony and messaging, networking, Google maps, location-based services, persisting data, leveraging hardware features, and more Android Application Development Cookbook is your solution to discovering...solutions!

iOS 11 Swift Programming Cookbook Jul 01 2020 iOS 11, Swift 4, and Xcode 9 provide many new APIs for iOS developers. With this cookbook, you'll learn more than 170 proven solutions for tackling the latest features in iOS 11 and watchOS 4, including new ways to use Swift and Xcode to make your day-to-day app development life easier. This collection of code-rich recipes also gets you up to speed on continuous delivery and continuous integration systems. Ideal for intermediate and advanced iOS developers looking to work with the newest version of iOS, these recipes include reusable code on GitHub, so you can put them to work in your project right away. Among the topics covered in this book: New features in Swift 4 and Xcode 9 Tools for continuous delivery and continuous integration Snapshot testing and test automation Creating

document-based applications Updated Map view and Core Location features iOS 11's Security and Password Autofill Data storage with Apple's Core Data Creating lively user interfaces with UI Dynamics Building iMessage applications and sticker packages Integrating Siri into your apps with Siri Kit Creating fascinating apps for Apple Watch

Python Parallel Programming Cookbook Feb 26 2020 Master efficient parallel programming to build powerful applications using Python About This Book Design and implement efficient parallel software Master new programming techniques to address and solve complex programming problems Explore the world of parallel programming with this book, which is a go-to resource for different kinds of parallel computing tasks in Python, using examples and topics covered in great depth Who This Book Is For Python Parallel Programming Cookbook is intended for software developers who are well versed with Python and want to use parallel programming techniques to write powerful and efficient code. This book will help you master the basics and the advanced of parallel computing. What You Will Learn Synchronize multiple threads and processes to manage parallel tasks Implement message passing communication between processes to build parallel applications Program your own GPU cards to address complex problems Manage computing entities to execute distributed computational tasks Write efficient programs by adopting the event-driven programming model Explore the cloud technology with Django and Google App Engine Apply parallel programming techniques that can lead to performance improvements In Detail Parallel programming techniques are required for a developer to get the best use of all the computational resources available today and to build efficient software systems. From multi-core to GPU systems up to the distributed architectures, the high computation of programs throughout requires the use of programming tools and software libraries. Because of this, it is becoming increasingly important to know what the parallel programming techniques are. Python is commonly used as even non-experts can easily deal with its concepts. This book will teach you parallel programming techniques using examples in Python and will help you explore the many ways in which you can write code that allows more than one process to happen at once. Starting with introducing you to the world of parallel computing, it moves on to cover the fundamentals in Python. This is followed by exploring the thread-based parallelism model using the Python threading module by synchronizing threads and using locks, mutex, semaphores queues, GIL, and the thread pool. Next you will be taught about process-based parallelism where you will synchronize processes using message passing along with learning about the performance of MPI Python Modules. You will then go on to learn the asynchronous parallel programming model using the Python asyncio module along with handling exceptions. Moving on, you will discover distributed computing with Python, and learn how to install a broker, use Celery Python Module, and create a worker. You will also understand the StarCluster framework, Pycsp, Scoop, and Disco modules in Python. Further on, you will learn GPU programming with Python using the PyCUDA module along with evaluating performance limitations. Next you will get acquainted with the cloud computing concepts in Python, using Google App Engine (GAE), and building your first application with GAE. Lastly, you will learn about grid computing concepts in Python and using PyGlobus toolkit, GFTP and GASS COPY to transfer files, and service monitoring in PyGlobus. Style and approach A step-by-step guide to parallel programming using Python, with recipes accompanied by one or more programming examples. It is a practically oriented book and has all the necessary underlying parallel computing concepts.

iOS 6 Programming Cookbook Jul 25 2022 Overcome the vexing issues you'll inevitably confront when creating apps for the iPhone, iPad, or iPod touch. By making use of new and revised recipes in this updated cookbook, you'll quickly learn the steps necessary to write complete iOS apps—including ways to store and protect data, enhance and animate graphics, manage files and folders, and take advantage of Passbook.

Thoroughly updated for iOS 6 SDK, this cookbook shows you how to use hundreds of techniques to solve problems that developers of all levels commonly face. Each recipe includes sample code you can use right away. Use Pass Kit to deliver digitally-signed passes such as loyalty cards Define the layout of UI elements with Cocoa Auto Layout Develop location-aware apps Get working examples for implementing gesture recognizers Use new Objective-C Runtime features Play audio and video files and access the iPod library Retrieve contacts and groups from the Address Book Determine camera availability and access the Photo Library Create multitasking-aware apps Use Event Kit to manage calendars, dates, and events Apply the accelerometer and gyroscope Enhance your app with the iCloud service

JavaScript Application Cookbook Sep 14 2021 "JavaScript Cookbook" literally hands the Webmaster a set of ready-to-go, client-side JavaScript applications with thorough documentation to help them understand and extend those applications. By providing such a set of applications, this guide allows Webmasters to immediately add extra functionality to their Web sites.

Go Programming Cookbook Apr 21 2022 Tackle the trickiest of problems in Go programming with this practical guide Key Features Develop applications for different domains using modern programming techniques Tackle common problems when it comes to parallelism, concurrency, and reactive programming in Go Work with ready-to-execute code based on the latest version of Go Book Description Go (or Golang) is a statically typed programming language developed at Google. Known for its vast standard library, it also provides features such as garbage collection, type safety, dynamic-typing capabilities, and additional built-in types. This book will serve as a reference while implementing Go features to build your own applications. This Go cookbook helps you put into practice the advanced concepts and libraries that Golang offers. The recipes in the book follow best practices such as documentation, testing, and vendoring with Go modules, as well as performing clean abstractions using interfaces. You'll learn how code works and the common pitfalls to watch out for. The book covers basic type and error handling, and then moves on to explore applications, such as websites, command-line tools, and filesystems, that interact with users. You'll even get to grips with parallelism, distributed systems, and performance tuning. By the end of the book, you'll be able to use open source code and concepts in Go programming to build enterprise-class applications without any hassle. What you will learn Work with third-party Go projects and modify them for your use Write Go code using modern best practices Manage your dependencies with the new Go module system Solve common problems encountered when dealing with backend systems or DevOps Explore the Go standard library and its uses Test, profile, and fine-tune Go applications Who this book is for If you're a web developer, programmer, or enterprise developer looking for quick solutions to common and not-so-common problems in Go programming, this book is for you. Basic knowledge of the Go language is assumed.

Qt5 C++ GUI Programming Cookbook May 11 2021 Use Qt 5 to design and build functional, appealing, and user-friendly graphical user interfaces (GUIs) for your applications. Key Features Learn to use Qt 5 to design and customize the look and feel of your application Improve the visual quality of an application by using graphics rendering and animation Understand the balance of presentation and web content that will make an application appealing yet functional Book Description With the growing need to develop GUIs for multiple targets and multiple screens, improving the visual quality of your application becomes important so that it stands out from your competitors. With its cross-platform ability and the latest UI paradigms, Qt makes it possible to build intuitive, interactive, and user-friendly user interfaces for your applications. Qt5 C++ GUI Programming Cookbook, Second Edition teaches you how to develop functional and appealing user interfaces using the latest version of QT5 and C++. This book will help you learn a variety of topics such as GUI customization and animation, graphics rendering, implementing Google Maps, and more. You will also be taken through advanced concepts like asynchronous programming, event handling using signals and slots, network programming, various aspects of optimizing your application. By the end of the book, you will be confident to design and customize GUI applications that meet your clients' expectations and have an understanding of best practice solutions for common problems. What you will learn Animate GUI elements using Qt5's built-in animation system Draw shapes and 2D images using Qt5's powerful rendering system Implement an industry-standard OpenGL library in your project Build a mobile app that supports touch events and exports it onto devices Parse and extract data from an XML file and present it on your GUI Interact with web content by calling JavaScript functions from C++ Access MySQL and SQLite

databases to retrieve data and display it on your GUI Who this book is for This intermediate-level book is designed for those who want to develop software using Qt 5. If you want to improve the visual quality and content presentation of your software application, this book is for you. Prior experience of C++ programming is required.

Secure Programming Cookbook for C and C++ Nov 04 2020 Password sniffing, spoofing, buffer overflows, and denial of service: these are only a few of the attacks on today's computer systems and networks. At the root of this epidemic is poorly written, poorly tested, and insecure code that puts everyone at risk. Clearly, today's developers need help figuring out how to write code that attackers won't be able to exploit. But writing such code is surprisingly difficult. Secure Programming Cookbook for C and C++ is an important new resource for developers serious about writing secure code. It contains a wealth of solutions to problems faced by those who care about the security of their applications. It covers a wide range of topics, including safe initialization, access control, input validation, symmetric and public key cryptography, cryptographic hashes and MACs, authentication and key exchange, PKI, random numbers, and anti-tampering. The rich set of code samples provided in the book's more than 200 recipes will help programmers secure the C and C++ programs they write for both Unix® (including Linux®) and Windows® environments. Readers will learn: How to avoid common programming errors, such as buffer overflows, race conditions, and format string problems How to properly SSL-enable applications How to create secure channels for client-server communication without SSL How to integrate Public Key Infrastructure (PKI) into applications Best practices for using cryptography properly Techniques and strategies for properly validating input to programs How to launch programs securely How to use file access mechanisms properly Techniques for protecting applications from reverse engineering The book's web site supplements the book by providing a place to post new recipes, including those written in additional languages like Perl, Java, and Python. Monthly prizes will reward the best recipes submitted by readers. Secure Programming Cookbook for C and C++ is destined to become an essential part of any developer's library, a code companion developers will turn to again and again as they seek to protect their systems from attackers and reduce the risks they face in today's dangerous world.

Kotlin Programming Cookbook May 23 2022 Discover Android programming and web development by understanding the concepts of Kotlin Programming Key Features Practical solutions to your common programming problems with Kotlin 1.1 Leverage the functional power of Kotlin to ease your Android application development Learn to use Java code in conjunction with Kotlin Book Description The Android team has announced first-class support for Kotlin 1.1. This acts as an added boost to the language and more and more developers are now looking at Kotlin for their application development. This recipe-based book will be your guide to learning the Kotlin programming language. The recipes in this book build from simple language concepts to more complex applications of the language. After the fundamentals of the language, you will learn how to apply the object-oriented programming features of Kotlin 1.1. Programming with Lambdas will show you how to use the functional power of Kotlin. This book has recipes that will get you started with Android programming with Kotlin 1.1, providing quick solutions to common problems encountered during Android app development. You will also be taken through recipes that will teach you microservice and concurrent programming with Kotlin. Going forward, you will learn to test and secure your applications with Kotlin. Finally, this book supplies recipes that will help you migrate your Java code to Kotlin and will help ensure that it's interoperable with Java. What you will learn Understand the basics and object-oriented concepts of Kotlin Programming Explore the full potential of collection frameworks in Kotlin Work with SQLite databases in Android, make network calls, and fetch data over a network Use Kotlin's Anko library for efficient and quick Android development Uncover some of the best features of Kotlin: Lambdas and Delegates Set up web service development environments, write servlets, and build RESTful services with Kotlin Learn how to write unit tests, integration tests, and instrumentation/acceptance tests. Who this book is for This book will appeal to Kotlin developers keen to find solutions for their common programming problems. Java programming knowledge would be an added advantage.

Rust Programming Cookbook Sep 02 2020 Practical solutions to overcome challenges in creating console and web applications and working with systems-level and embedded code, network programming, deep neural networks, and much more. Key Features Work through recipes featuring advanced concepts

such as concurrency, unsafe code, and macros to migrate your codebase to the Rust programming language. Learn how to run machine learning models with Rust. Explore error handling, macros, and modularization to write maintainable code. Book Description Rust 2018, Rust's first major milestone since version 1.0, brings more advancement in the Rust language. The Rust Programming Cookbook is a practical guide to help you overcome challenges when writing Rust code. This Rust book covers recipes for configuring Rust for different environments and architectural designs, and provides solutions to practical problems. It will also take you through Rust's core concepts, enabling you to create efficient, high-performance applications that use features such as zero-cost abstractions and improved memory management. As you progress, you'll delve into more advanced topics, including channels and actors, for building scalable, production-grade applications, and even get to grips with error handling, macros, and modularization to write maintainable code. You will then learn how to overcome common roadblocks when using Rust for systems programming, IoT, web development, and network programming. Finally, you'll discover what Rust 2018 has to offer for embedded programmers. By the end of the book, you'll have learned how to build fast and safe applications and services using Rust. What you will learn Understand how Rust provides unique solutions to solve system programming language problems Grasp the core concepts of Rust to develop fast and safe applications Explore the possibility of integrating Rust units into existing applications for improved efficiency Discover how to achieve better parallelism and security with Rust Write Python extensions in Rust Compile external assembly files and use the Foreign Function Interface (FFI) Build web applications and services using Rust for high performance Who this book is for The Rust cookbook is for software developers looking to enhance their knowledge of Rust and leverage its features using modern programming practices. Familiarity with Rust language is expected to get the most out of this book.

Shared Memory Application Programming Nov 16 2021 Shared Memory Application Programming presents the key concepts and applications of parallel programming, in an accessible and engaging style applicable to developers across many domains. Multithreaded programming is today a core technology, at the basis of all software development projects in any branch of applied computer science. This book guides readers to develop insights about threaded programming and introduces two popular platforms for multicore development: OpenMP and Intel Threading Building Blocks (TBB). Author Victor Alessandrini leverages his rich experience to explain each platform's design strategies, analyzing the focus and strengths underlying their often complementary capabilities, as well as their interoperability. The book is divided into two parts: the first develops the essential concepts of thread management and synchronization, discussing the way they are implemented in native multithreading libraries (Windows threads, Pthreads) as well as in the modern C++11 threads standard. The second provides an in-depth discussion of TBB and OpenMP including the latest features in OpenMP 4.0 extensions to ensure readers' skills are fully up to date. Focus progressively shifts from traditional thread parallelism to modern task parallelism deployed by modern programming environments. Several chapters include examples drawn from a variety of disciplines, including molecular dynamics and image processing, with full source code and a software library incorporating a number of utilities that readers can adapt into their own projects. Designed to introduce threading and multicore programming to teach modern coding strategies for developers in applied computing Leverages author Victor Alessandrini's rich experience to explain each platform's design strategies, analyzing the focus and strengths underlying their often complementary capabilities, as well as their interoperability Includes complete, up-to-date discussions of OpenMP 4.0 and TBB Based on the author's training sessions, including information on source code and software libraries which can be repurposed

Android Application Development Cookbook Jul 13 2021 Lays out dozens of step-by-step solutions for programming tasks necessary for developing apps for smartphones and tablets using the Android 4 operating system. Original.

OpenCV 2 Computer Vision Application Programming Cookbook Mar 01 2023 This is a cookbook that shows results obtained on real images with detailed explanations and the relevant screenshots. The recipes contain code accompanied with suitable explanations that will facilitate your learning. If you are a novice C++ programmer who wants to learn how to use the OpenCV library to build computer vision applications, then this cookbook is appropriate for you. It is also suitable for professional software developers wishing to

be introduced to the concepts of computer vision programming. It can be used as a companion book in university-level computer vision courses. It constitutes an excellent reference for graduate students and researchers in image processing and computer vision. The book provides a good combination of basic to advanced recipes. Basic knowledge of C++ is required.

Go Web Development Cookbook Aug 14 2021 86 recipes on how to build fast, scalable, and powerful web services and applications with Go Key Features Become proficient in RESTful web services Build scalable, high-performant web applications in Go Get acquainted with Go frameworks for web development Book Description Go is an open source programming language that is designed to scale and support concurrency at the language level. This gives you the liberty to write large concurrent web applications with ease. From creating web application to deploying them on Amazon Cloud Services, this book will be your one-stop guide to learn web development in Go. The Go Web Development Cookbook teaches you how to create REST services, write microservices, and deploy Go Docker containers. Whether you are new to programming or a professional developer, this book will help get you up to speed with web development in Go. We will focus on writing modular code in Go; in-depth informative examples build the base, one step at a time. You will learn how to create a server, work with static files, SQL, NoSQL databases, and Beego. You will also learn how to create and secure REST services, and create and deploy Go web application and Go Docker containers on Amazon Cloud Services. By the end of the book, you will be able to apply the skills you've gained in Go to create and explore web applications in any domain. What you will learn Create a simple HTTP and TCP web server and understand how it works Explore record in a MySQL and MongoDB database Write and consume RESTful web service in Go Invent microservices in Go using Micro - a microservice toolkit Create and Deploy the Beego application with Nginx Deploy Go web application and Docker containers on an AWS EC2 instance Who this book is for This book is for Go developers interested in learning how to use Go to build powerful web applications. A background in web development is expected.

iOS 10 Swift Programming Cookbook Feb 17 2022 Ready to build truly stunning apps for iPhone, iPad, and Apple Watch? This cookbook—written exclusively in Swift 3—provides more than 120 proven solutions for tackling the latest features in iOS 10 and watchOS 3. With these code-rich recipes, you'll learn how to build dynamic voice interfaces with Siri and messaging apps with iMessage. You'll also learn how to use interactive maps, multitasking functionality, the UI Testing framework, and many other features. This cookbook is ideal for intermediate and advanced iOS developers looking to work with the newest versions of Apple's mobile operating systems. Each recipe includes reusable code that's available on GitHub, so you can put it to work right away. Let users interact with your apps and services through Siri Write your own iMessage extensions that allow added interactivity Work with features in Swift 3, Xcode 8, and Interface Builder Build standalone apps for Apple Watch Create vibrant user interfaces with new UIKit features Use Spotlight APIs to make your app content searchable Add Picture in Picture playback functionality to iPad apps Take advantage of MapKit and Core Location updates Use Apple's new UI Testing framework Liven up your UI with gravity and turbulence fields

OpenCV Computer Vision Application Programming Cookbook Second Edition Dec 30 2022 Over 50 recipes to help you build computer vision applications in C++ using the OpenCV library In Detail OpenCV Computer Vision Application Programming Cookbook Second Edition is your guide to the development of computer vision applications. The book shows you how to install and deploy the OpenCV library to write an effective computer vision application. Different techniques for image enhancement, pixel manipulation, and shape analysis will be presented. You will also learn how to process video from files or cameras and detect and track moving objects. You will also be introduced to recent approaches in machine learning and object classification. This book is a comprehensive reference guide that exposes you to practical and fundamental computer vision concepts, illustrated by extensive examples. What You Will Learn Install and create a program using the OpenCV library Process an image by manipulating its pixels Analyze an image using histograms Segment images into homogenous regions and extract meaningful objects Apply image filters to enhance image content Exploit image geometry in order to relate different views of a pictured scene Calibrate the camera from different image observations Detect faces and people in images using machine learning techniques Downloading the example code for this book. You can download the example code files

for all Packt books you have purchased from your account at <http://www.PacktPub.com>. If you purchased this book elsewhere, you can visit <http://www.PacktPub.com/support> and register to have the files e-mailed directly to you.

JavaFX 1.2 Application Development Cookbook Oct 28 2022 Over 60 recipes to create rich Internet applications with many exciting features.

OpenCV 4 Computer Vision Application Programming Cookbook Jan 31 2023 Discover interesting recipes to help you understand the concepts of object detection, image processing, and facial detection Key Features Explore the latest features and APIs in OpenCV 4 and build computer vision algorithms Develop effective, robust, and fail-safe vision for your applications Build computer vision algorithms with machine learning capabilities Book Description OpenCV is an image and video processing library used for all types of image and video analysis. Throughout the book, you'll work through recipes that implement a variety of tasks, such as facial recognition and detection. With 70 self-contained tutorials, this book examines common pain points and best practices for computer vision (CV) developers. Each recipe addresses a specific problem and offers a proven, best-practice solution with insights into how it works, so that you can copy the code and configuration files and modify them to suit your needs. This book begins by setting up OpenCV, and explains how to manipulate pixels. You'll understand how you can process images with classes and count pixels with histograms. You'll also learn detecting, describing, and matching interest points. As you advance through the chapters, you'll get to grips with estimating projective relations in images, reconstructing 3D scenes, processing video sequences, and tracking visual motion. In the final chapters, you'll cover deep learning concepts such as face and object detection. By the end of the book, you'll be able to confidently implement a range of computer vision algorithms to meet the technical requirements of your complex CV projects What you will learn Install and create a program using the OpenCV library Segment images into homogenous regions and extract meaningful objects Apply image filters to enhance image content Exploit image geometry to relay different views of a pictured scene Calibrate the camera from different image observations Detect people and objects in images using machine learning techniques Reconstruct a 3D scene from images Explore face detection using deep learning Who this book is for If you're a CV developer or professional who already uses or would like to use OpenCV for building computer vision software, this book is for you. You'll also find this book useful if you're a C++ programmer looking to extend your computer vision skillset by learning OpenCV.

Laravel Application Development Cookbook Aug 26 2022 Get to grips with a new technology, understand what it is and what it can do for you, and then get to work with the most important features and tasks. A short and precise guide to get you started with EaselJS, helping you to create some cool applications and games. EaselJS greatly simplifies application development in HTML5 Canvas using a syntax and an architecture very similar to the ActionScript 3.0 language. As a result, Flash / Flex developers will immediately feel at home but it's very easy to learn even if you've never opened Flash in your life. The book targets Web designers, animators, Digital content producers, and Flash and Flex developers.

iOS 7 Programming Cookbook Jun 11 2021 Overcome the vexing issues you're likely to face when creating apps for the iPhone, iPad, or iPod touch. With new and thoroughly revised recipes in this updated cookbook, you'll quickly learn the steps necessary to work with the iOS 7 SDK--including ways to store and protect data, send and receive notifications, enhance and animate graphics, manage files and folders, and take advantage of UI Dynamics.

Boost C++ Application Development Cookbook Apr 09 2021 Learn to build applications faster and better by leveraging the real power of Boost and C++ About This Book Learn to use the Boost libraries to simplify your application development Learn to develop high quality, fast and portable applications Learn the relations between Boost and C++11/C++4/C++17 Who This Book Is For This book is for developers looking to improve their knowledge of Boost and who would like to simplify their application development processes. Prior C++ knowledge and basic knowledge of the standard library is assumed. What You Will Learn Get familiar with new data types for everyday use Use smart pointers to manage resources Get to grips with compile-time computations and assertions Use Boost libraries for multithreading Learn about parallel execution of different task Perform common string-related tasks using Boost libraries Split all the processes, computations, and interactions to tasks and process them independently Learn the basics of

working with graphs, stacktracing, testing and interprocess communications Explore different helper macros used to detect compiler, platform and Boost features In Detail If you want to take advantage of the real power of Boost and C++ and avoid the confusion about which library to use in which situation, then this book is for you. Beginning with the basics of Boost C++, you will move on to learn how the Boost libraries simplify application development. You will learn to convert data such as string to numbers, numbers to string, numbers to numbers and more. Managing resources will become a piece of cake. You'll see what kind of work can be done at compile time and what Boost containers can do. You will learn everything for the development of high quality fast and portable applications. Write a program once and then you can use it on Linux, Windows, MacOS, Android operating systems. From manipulating images to graphs, directories, timers, files, networking - everyone will find an interesting topic. Be sure that knowledge from this book won't get outdated, as more and more Boost libraries become part of the C++ Standard.

Android Application Development Cookbook - Second Edition Jan 19 2022 Over 100 recipes to help you solve the most common problems faced by Android Developers today About This Book- Find the answers to your common Android programming problems, from set up to security, to help you deliver better applications, faster- Uncover the latest features of Android Marshmallow to make your applications stand out- Get up to speed with Android Studio 1.4 - the first Android Studio based on the IntelliJ IDE from JetBrains Who This Book Is For If you are new to Android development and want to take a hands-on approach to learning the framework, or if you are an experienced developer in need of clear working code to solve the many challenges in Android development, you can benefit from this book. Either way, this is a resource you'll want to keep at your desk for a quick reference to solve new problems as you tackle more challenging projects. What You Will Learn- Along with Marshmallow, get hands-on working with Google's new Android Studio IDE- Develop applications using the latest Android framework while maintaining backward-compatibility with the support library- Master Android programming best practices from the recipes- Create exciting and engaging applications using knowledge gained from recipes on graphics, animations, and multimedia- Work through succinct steps on specifics that will help you complete your project faster- Keep your app responsive (and prevent ANRs) with examples on the AsyncTask class- Utilize Google Speech Recognition APIs for your app.- Make use of Google Cloud Messaging (GCM) to create Push Notifications for your users- Get a better understanding of the Android framework through detailed explanations In Detail The Android OS has the largest installation base of any operating system in the world; there has never been a better time to learn Android development to write your own applications, or to make your own contributions to the open source community! This "cookbook" will make it easy for you to jump to a topic of interest and get what you need to implement the feature in your own application. If you are new to Android and learn best by "doing," then this book will provide many topics of interest. Starting with the basics of Android development, we move on to more advanced concepts, and we'll guide you through common tasks developers struggle to solve. The first few chapters cover the basics including Activities, Layouts, Widgets, and the Menu. From there, we cover fragments and data storage (including SQLite), device sensors, the camera, and GPS. Then we move on more advanced topics such as graphics and animation (including OpenGL), multi-threading with AsyncTask, and Internet functionality with Volley. We'll also demonstrate Google Maps and Google Cloud Messaging (also known as Push Notifications) using the Google API Library. Finally, we'll take a look at several online services designed especially for Android development. Take your application big-time with full Internet web services without having to become a server admin by leveraging the power of Backend as a Service (BaaS) providers. Style and approach This book progresses from the fundamentals of Android Development to more advanced concepts, with recipes to solve the most common problems faced by developers. This cookbook makes it easy to jump to specific topics of interest, where you'll find simple steps to implement the solution and get a clear explanation of how it works.

OpenCV 3 Computer Vision Application Programming Cookbook - Third Edition Apr 02 2023 Over 100 recipes to help you build computer vision applications that make the most of the popular C library OpenCV 3 About This Book *Written to the latest, gold-standard specification of OpenCV 3 *Master OpenCV, the open source library of the computer vision community *Master fundamental concepts in computer vision

and image processing*Learn about the important classes and functions of OpenCV with complete working examples applied to real imagesWho This Book Is ForOpenCV 3 Computer Vision Application Programming Cookbook Third Edition is appropriate for novice C++ programmers who want to learn how to use the OpenCV library to build computer vision applications. It is also suitable for professional software developers who wish to be introduced to the concepts of computer vision programming. It can also be used as a companion book for university-level computer vision courses. It constitutes an excellent reference for graduate students and researchers in image processing and computer vision.What You Will Learn*Install and create a program using the OpenCV library*Process an image by manipulating its pixels*Analyze an image using histograms*Segment images into homogenous regions and extract meaningful objects*Apply image filters to enhance image content*Exploit the image geometry in order to relay different views of a pictured scene*Calibrate the camera from different image observations*Detect faces and people in images using machine learning techniquesIn DetailMaking your applications see has never been easier with OpenCV. With it, you can teach your robot how to follow your cat, write a program to correctly identify the members of One Direction, or even help you find the right colors for your redecoration.OpenCV 3 Computer Vision Application Programming Cookbook Third Edition provides a complete introduction to the OpenCV library and explains how to build your first computer vision program. You will be presented with a variety of computer vision algorithms and exposed to important concepts in image and video analysis that will enable you to build your own computer vision applications.This book helps you to get started with the library, and shows you how to install and deploy the OpenCV library to write effective computer vision applications following good programming practices. You will learn how to read and write images and manipulate their pixels. Different techniques for image enhancement and shape analysis will be presented. You will learn how to detect specific image features such as lines, circles or corners. You will be introduced to the concepts of mathematical morphology and image filtering.The most recent methods for image matching and object recognition are described, and you'll discover how to process video from files or cameras, as well as how to detect and track moving objects. Techniques to achieve camera calibration and perform multiple-view analysis will also be explained. Finally, you'll also get acquainted with recent approaches in machine learning and object classification.

Odata Programming Cookbook for .Net Developers Jan 07 2021 The recipes in this book are easy to understand and follow as the author discusses real-world scenarios. It is not a comprehensive reference to the whole of OData, but a practical guide that boosts proficiency when working with the various aspects of OData programming. The examples are supported by relevant background information for ease of understanding. If you are a .NET developer and you want to learn how to use OData in real-world data access application development, then this book is for you. To follow the recipes you will need to be comfortable with .NET Framework, Visual Studio IDE, C# language, and the basics of web programming like HTTP, XML, JSON.

Qt5 Python GUI Programming Cookbook Aug 02 2020 Over 60 recipes to help you design interactive, smart, and cross-platform GUI applications Key Features Get succinct QT solutions to pressing GUI programming problems in Python Learn how to effectively implement reactive programming Build customized applications that are robust and reliable Book Description PyQt is one of the best cross-platform interface toolkits currently available; it's stable, mature, and completely native. If you want control over all aspects of UI elements, PyQt is what you need. This book will guide you through every concept necessary to create fully functional GUI applications using PyQt, with only a few lines of code. As you expand your GUI using more widgets, you will cover networks, databases, and graphical libraries that greatly enhance its functionality. Next, the book guides you in using Qt Designer to design user interfaces and implementing and testing dialogs, events, the clipboard, and drag and drop functionality to customize your GUI. You will learn a variety of topics, such as look and feel customization, GUI animation, graphics rendering, implementing Google Maps, and more. Lastly, the book takes you through how Qt5 can help you to create cross-platform apps that are compatible with Android and iOS. You will be able to develop functional and appealing software using PyQt through interesting and fun recipes that will expand your knowledge of GUIs What you will learn Use basic Qt components, such as a radio button, combo box, and sliders Use QSpinBox and sliders to handle different signals generated on mouse clicks Work with different Qt layouts to meet

user interface requirements Create custom widgets and set up customizations in your GUI Perform asynchronous I/O operations and thread handling in the Python GUI Employ network concepts, internet browsing, and Google Maps in UI Use graphics rendering and implement animation in your GUI Make your GUI application compatible with Android and iOS devices Who this book is for If you're an intermediate Python programmer wishing to enhance your coding skills by writing powerful GUIs in Python using PyQt, this is the book for you.

Android Cookbook Jan 25 2020 Provides instruction on building Android apps, including solutions to working with web services, multitouch gestures, location awareness, and device features.

IOS 8 Swift Programming Cookbook Oct 16 2021 Entirely rewritten for Apple's Swift programming language, this updated cookbook helps you overcome the vexing issues you're likely to face when creating apps for iOS devices. You'll find hundreds of new and revised recipes for using the iOS 8 SDK, including techniques for working with Health data and HomeKit accessories, enhancing and animating graphics, storing and protecting data, sending and receiving notifications, and managing files and folders among them. Each recipe includes sample code on GitHub that you can use right away. Use CloudKit APIs to store information in the cloud with ease Create custom keyboards and extensions Access users' health-related information with HealthKit Interact with accessories inside the user's home with HomeKit Create vibrant and lifelike user interfaces with UIKit Dynamics Use the Keychain to protect your app's data Develop location-aware and multitasking-aware apps Work with iOS 8's audio and video APIs Use Event Kit UI to manage calendars, dates, and events Take advantage of the accelerometer and the gyroscope Get working examples for implementing gesture recognizers Retrieve and manipulate contacts and groups from the Address Book Determine a camera's availability and access the Photo Library

Julia 1.0 Programming Cookbook Dec 26 2019 Discover the new features and widely used packages in Julia to solve complex computational problems in your statistical applications. Key FeaturesAddress the core problems of programming in Julia with the most popular packages for common tasksTackle issues while working with Databases and Parallel data processing with JuliaExplore advanced features such as metaprogramming, functional programming, and user defined typesBook Description Julia, with its dynamic nature and high-performance, provides comparatively minimal time for the development of computational models with easy-to-maintain computational code. This book will be your solution-based guide as it will take you through different programming aspects with Julia. Starting with the new features of Julia 1.0, each recipe addresses a specific problem, providing a solution and explaining how it works. You will work with the powerful Julia tools and data structures along with the most popular Julia packages. You will learn to create vectors, handle variables, and work with functions. You will be introduced to various recipes for numerical computing, distributed computing, and achieving high performance. You will see how to optimize data science programs with parallel computing and memory allocation. We will look into more advanced concepts such as metaprogramming and functional programming. Finally, you will learn how to tackle issues while working with databases and data processing, and will learn about on data science problems, data modeling, data analysis, data manipulation, parallel processing, and cloud computing with Julia. By the end of the book, you will have acquired the skills to work more effectively with your data What you will learnBoost your code's performance using Julia's unique featuresOrganize data in to fundamental types of collections: arrays and dictionariesOrganize data science processes within Julia and solve related problemsScale Julia computations with cloud computingWrite data to IO streams with Julia and handle web transferDefine your own immutable and mutable typesSpeed up the development process using metaprogrammingWho this book is for This book is for developers who would like to enhance their Julia programming skills and would like to get some quick solutions to their common programming problems. Basic Julia programming knowledge is assumed.

Tkinter GUI Application Development Cookbook Dec 18 2021 Discover solutions to all your Tkinter and Python GUI development problems Key Features Integrate efficient Python GUI programming techniques with Tkinter Efficiently implement advanced MVC architectures in your Python GUI apps Solve all your problems related to Tkinter and Python GUI development Book Description As one of the more versatile programming languages, Python is well-known for its batteries-included philosophy, which includes a rich set of modules in its standard library; Tkinter is the library included for building desktop applications. Due

to this, Tkinter is a common choice for rapid GUI development, and more complex applications can benefit from the full capabilities of this library. This book covers all of your Tkinter and Python GUI development problems and solutions. Tkinter GUI Application Development Cookbook starts with an overview of Tkinter classes and at the same time provides recipes for basic topics, such as layout patterns and event handling. Next, we cover how to develop common GUI patterns, such as entering and saving data, navigating through menus and dialogs, and performing long-running actions in the background. You can then make your apps leverage network resources effectively and perform graphical operations on a canvas and related tasks such as detecting collisions between items. Finally, this book covers using themed widgets, an extension of Tk widgets that have a more native look and feel. Finally, this book covers using the canvas and themed widgets. By the end of the book, you will have an in-depth knowledge of Tkinter classes, and will know how to use them to build efficient and rich GUI applications. What you will learn Add widgets and handle user events Lay out widgets within windows using frames and the different geometry managers Configure widgets so that they have a customized appearance and behavior Improve the navigation of your apps with menus and dialogs Apply object-oriented programming techniques in Tkinter applications Use threads to achieve responsiveness and update the GUI Explore the capabilities of the canvas widget and the types of items that can be added to it Extend Tkinter applications with the TTK (themed Tkinter) module Who this book is for This book is for Python developers who are familiar with the basics of the language syntax, data structures, and OOP. You do not need previous experience with Tkinter or other GUI development libraries.

Web2py Application Development Cookbook Sep 26 2022 Annotation web2py is a free open source full-stack framework for rapid development of fast, scalable, secure and portable database-driven web-based applications. It is written and programmable in Python, and straightforward to run. web2py implements Model-View-Controller design, server-side form validation, and postbacks that make the code more readable, scalable, and maintainable. Are you familiar with web2py, and interested in gaining more advanced knowledge? web2py Application Development Cookbook gives you the necessary knowledge to make you a web2py expert. Right from teaching you about the database abstraction layer to adding AJAX effects to recipes about recipe, the book will make you a master of web2py through advanced practical recipes without any drudgery or straining the brain. web2py Application Development Cookbook is the tool you will need to expand and enhance your web2py skills. This book begins with teaching you running web2py in various different systems followed by building simple applications. It focuses on database abstraction layer next and then explains building advanced forms. Adding stunning AJAX effects, using third party libraries and recipes on web services follow. Advanced recipes on authentication and authorization are taught and then routing and reporting recipes claim your attention. There is a final wrap-up with useful, interesting tips and tricks which you will really enjoy. In short, this book will make you an expert in web2py in a trouble-free, quick, and easy manner.

PHP 7 Programming Cookbook Feb 05 2021 Over 80 recipes that will take your PHP 7 web development skills to the next level! About This Book This is the most up-to-date book in the market on PHP It covers the new features of version 7.x, best practices for server-side programming, and MVC frameworks The recipe-based approach will allow you to explore the unique capabilities that PHP offers to web programmers Who This Book Is For If you are an aspiring web developer, mobile developer, or backend programmer, then this book is for you as it will take your PHP programming skills to next level. Basic knowledge of PHP programming is assumed. What You Will Learn Use advanced PHP 7 features, such as the Abstract Syntax Tree, Uniform Variable Syntax, Scalar Type Hints, Generator Delegation, Anonymous Classes, and the Context Sensitive Lexer Discover where and when PHP 5 code needs to be re-written to avoid backwards-compatibility breaks Improve the overall application security and error handling by taking advantage of classes that implement the new throwable interface Solve practical real-world programming problems using PHP 7 Develop middle-ware classes that allow PHP developers to glue different open source libraries together seamlessly Define and Implement PSR-7 classes Create custom middleware using PSR-7 compliant classes Test and debug your code, and get to know the best practices In Detail PHP 7 comes with a myriad of new features and great tools to optimize your code and make your code perform faster than in previous versions. Most importantly, it allows you to maintain high traffic on your websites with low-cost hardware and servers through a multithreading web server. This book demonstrates intermediate to advanced PHP

techniques with a focus on PHP 7. Each recipe is designed to solve practical, real-world problems faced by PHP developers like yourself every day. We also cover new ways of writing PHP code made possible only in version 7. In addition, we discuss backward-compatibility breaks and give you plenty of guidance on when and where PHP 5 code needs to be changed to produce the correct results when running under PHP 7. This book also incorporates the latest PHP 7.x features. By the end of the book, you will be equipped with the tools and skills required to deliver efficient applications for your websites and enterprises. Style and approach This book takes a recipe-based approach, with real-world examples that can serve as building blocks for a larger application. Each recipe is self-contained with no external dependencies. This book follows a problem-solution strategy so you understand how to deal with various scenarios you may encounter while using PHP 7 in your daily activities.

Serverless Programming Cookbook Dec 06 2020 Build, secure, and deploy real-world serverless applications in AWS and peek into the serverless cloud offerings from Azure, Google Cloud, and IBM Cloud Key Features Build serverless applications with AWS Lambda, AWS CloudFormation and AWS CloudWatch Perform data analytics and natural language processing (NLP) on the AWS serverless platform Explore various design patterns and best practices involved in serverless computing Book Description Managing physical servers will be a thing of the past once you're able to harness the power of serverless computing. If you're already prepped with the basics of serverless computing, *Serverless Programming Cookbook* will help you take the next step ahead. This recipe-based guide provides solutions to problems you might face while building serverless applications. You'll begin by setting up Amazon Web Services (AWS), the primary cloud provider used for most recipes. The next set of recipes will cover various components to build a Serverless application including REST APIs, database, user management, authentication, web hosting, domain registration, DNS management, CDN, messaging, notifications and monitoring. The book also introduces you to the latest technology trends such as Data Streams, Machine Learning and NLP. You will also see patterns and practices for using various services in a real world application. Finally, to broaden your understanding of Serverless computing, you'll also cover getting started guides for other cloud providers such as Azure, Google Cloud Platform and IBM cloud. By the end of this book, you'll have acquired the skills you need to build serverless applications efficiently using various cloud offerings. What you will learn Serverless computing in AWS and explore services with other clouds Develop full-stack apps with API Gateway, Cognito, Lambda and DynamoDB Web hosting with S3, CloudFront, Route 53 and AWS Certificate Manager SQS and SNS for effective communication between microservices Monitoring and troubleshooting with CloudWatch logs and metrics Explore Kinesis Streams, Amazon ML models and Alexa Skills Kit Who this book is for For developers looking for practical solutions to common problems while building a serverless application, this book provides helpful recipes. To get started with this intermediate-level book, knowledge of basic programming is a must.

Yii 1.1 Application Development Cookbook Mar 21 2022 Over 80 recipes to help you master using the Yii PHP framework.

Odata Programming Cookbook for . Net Developers May 30 2020 A fast track example-driven guide with clear instructions and details for OData programming with .NET Framework.

iOS 11 Swift Programming Cookbook Jun 23 2022 iOS 11, Swift 4, and Xcode 9 provide many new APIs for iOS developers. With this cookbook, you'll learn more than 170 proven solutions for tackling the latest features in iOS 11 and watchOS 4, including new ways to use Swift and Xcode to make your day-to-day app development life easier. This collection of code-rich recipes also gets you up to speed on continuous delivery and continuous integration systems. Ideal for intermediate and advanced iOS developers looking to work with the newest version of iOS, these recipes include reusable code on GitHub, so you can put them to work in your project right away. Among the topics covered in this book: New features in Swift 4 and Xcode 9 Tools for continuous delivery and continuous integration Snapshot testing and test automation Creating document-based applications Updated Map view and Core Location features iOS 11's Security and Password Autofill Data storage with Apple's Core Data Creating lively user interfaces with UI Dynamics Building iMessage applications and sticker packages Integrating Siri into your apps with Siri Kit Creating fascinating apps for Apple Watch

Shared Memory Application Programming Mar 28 2020 Shared Memory Application Programming

presents the key concepts and applications of parallel programming, in an accessible and engaging style applicable to developers across many domains. Multithreaded programming is today a core technology, at the basis of all software development projects in any branch of applied computer science. This book guides readers to develop insights about threaded programming and introduces two popular platforms for multicore development: OpenMP and Intel Threading Building Blocks (TBB). Author Victor Alessandrini leverages his rich experience to explain each platform's design strategies, analyzing the focus and strengths underlying their often complementary capabilities, as well as their interoperability. The book is divided into two parts: the first develops the essential concepts of thread management and synchronization, discussing the way they are implemented in native multithreading libraries (Windows threads, Pthreads) as well as in the modern C++11 threads standard. The second provides an in-depth discussion of TBB and OpenMP including the latest features in OpenMP 4.0 extensions to ensure readers' skills are fully up to date. Focus progressively shifts from traditional thread parallelism to modern task parallelism deployed by modern programming environments. Several chapters include examples drawn from a variety of disciplines, including molecular dynamics and image processing, with full source code and a software library incorporating a number of utilities that readers can adapt into their own projects. Designed to introduce threading and multicore programming to teach modern coding strategies for developers in applied computing Leverages author Victor Alessandrini's rich experience to explain each platform's design strategies, analyzing the focus and strengths underlying their often complementary capabilities, as well as their interoperability Includes complete, up-to-date discussions of OpenMP 4.0 and TBB Based on the author's training sessions, including information on source code and software libraries which can be

repurposed

Java Extreme Programming Cookbook Oct 04 2020 Brimming with over 100 "recipes" for getting down to business and actually doing XP, the Java Extreme Programming Cookbook doesn't try to "sell" you on XP; it succinctly documents the most important features of popular open source tools for XP in Java--including Ant, Junit, Http'nit, Cactus, Tomcat, XDoclet--and then digs right in, providing recipes for implementing the tools in real-world environments.

OpenCV Computer Vision Application Programming Cookbook May 03 2023 OpenCV 3 Computer Vision Application Programming Cookbook is appropriate for novice C++ programmers who want to learn how to use the OpenCV library to build computer vision applications. It is also suitable for professional software developers wishing to be introduced to the concepts of computer vision programming. It can also be used as a companion book in a university-level computer vision courses. It constitutes an excellent reference for graduate students and researchers in image processing and computer vision.

PhoneGap Mobile Application Development Cookbook Apr 29 2020 "This cookbook consists of recipes with plenty of example code and is full of screenshots to make the learning curve easier and quicker, This book is for creative professionals, ideally with web development experience, who are interested in building applications for the emerging mobile market but do not want to learn a new SDK for every phone on the shelf. You should be comfortable with JavaScript, HTML, and CSS, and interested in learning the new advances in those technologies that allow for rich, native-style experiences. This book supports a beginner to advanced level of PhoneGap"--EBL.