
Boost Library Documentation

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Introduction to the Boost C++ Libraries
C++17 STL Cookbook
The C++ Programming Language
Windows Sysinternals Administrator's Reference
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Modern C++ for Absolute Beginners
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Learning Boost C++ Libraries
Thinking In C++ (2Nd Edition)
The Boost Graph Library
The Definitive ANTLR 4 Reference
The Boost C++ Libraries
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Caffeine for the Sustainment of Mental Task Performance
C++ Coding Standards
C++ Template Metaprogramming
Polygon Mesh Processing
Dive Into Python
The Hitchhiker's Guide to Python
Programming with POSIX Threads
Programming in Lua
Boost.Asio C++ Network Programming
OpenGL Reference Manual
Troubleshooting with the Windows Sysinternals Tools

Boost Library Documentation

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BRENDAN RILEY

Financial Instrument Pricing Using C++ Springer Science & Business Media

The Hitchhiker's Guide to Python takes the journeyman Pythonista to true expertise. More than any other language, Python was created with the philosophy of simplicity and parsimony. Now 25 years old, Python has become the primary or secondary language (after SQL) for many business users. With popularity comes diversity and possibly dilution. This guide, collaboratively written by over a hundred members of the Python community, describes best practices currently used by package and application developers. Unlike other books for this audience, The Hitchhiker's Guide is light on reusable code and heavier on design philosophy, directing the reader to excellent sources that already exist.

Modern C++ Design F.A. Davis

"The ongoing COVID-19 pandemic marks the most significant, singular global disruption since World War II, with health, economic, political, and security implications that will ripple for years to

come." -Global Trends 2040 (2021) Global Trends 2040-A More Contested World (2021), released by the US National Intelligence Council, is the latest report in its series of reports starting in 1997 about megatrends and the world's future. This report, strongly influenced by the COVID-19 pandemic, paints a bleak picture of the future and describes a contested, fragmented and turbulent world. It specifically discusses the four main trends that will shape tomorrow's world: - Demographics-by 2040, 1.4 billion people will be added mostly in Africa and South Asia. - Economics-increased government debt and concentrated economic power will escalate problems for the poor and middleclass. - Climate-a hotter world will increase water, food, and health insecurity. - Technology-the emergence of new technologies could both solve and cause problems for human life. Students of trends, policymakers, entrepreneurs, academics, journalists and anyone eager for a glimpse into the next decades, will find this report, with colored graphs, essential reading.

Global Trends 2040 Addison-Wesley Professional

Over 90 recipes that leverage the powerful features of the Standard Library in C++17 About This Book Learn the latest features of C++ and how to write better code by using the Standard Library

(STL). Reduce the development time for your applications. Understand the scope and power of STL features to deal with real-world problems. Compose your own algorithms without forfeiting the simplicity and elegance of the STL way. Who This Book Is For This book is for intermediate-to-advanced C++ programmers who want to get the most out of the Standard Template Library of the newest version of C++: C++ 17. What You Will Learn Learn about the new core language features and the problems they were intended to solve Understand the inner workings and requirements of iterators by implementing them Explore algorithms, functional programming style, and lambda expressions Leverage the rich, portable, fast, and well-tested set of well-designed algorithms provided in the STL Work with strings the STL way instead of handcrafting C-style code Understand standard support classes for concurrency and synchronization, and how to put them to work Use the filesystem library addition available with the C++17 STL In Detail C++ has come a long way and is in use in every area of the industry. Fast, efficient, and flexible, it is used to solve many problems. The upcoming version of C++ will see programmers change the way they code. If you want to grasp the practical usefulness of the C++17 STL in order to write smarter, fully portable code, then this book is for you. Beginning with new language features, this book will help

you understand the language's mechanics and library features, and offers insight into how they work. Unlike other books, ours takes an implementation-specific, problem-solution approach that will help you quickly overcome hurdles. You will learn the core STL concepts, such as containers, algorithms, utility classes, lambda expressions, iterators, and more, while working on practical real-world recipes. These recipes will help you get the most from the STL and show you how to program in a better way. By the end of the book, you will be up to date with the latest C++17 features and save time and effort while solving tasks elegantly using the STL. Style and approach This recipe-based guide will show you how to make the best use of C++ together with the STL to squeeze more out of the standard language

Making Summer Count Pearson Education

Rcpp is the glue that binds the power and versatility of R with the speed and efficiency of C++. With Rcpp, the transfer of data between R and C++ is nearly seamless, and high-performance statistical computing is finally accessible to most R users. Rcpp should be part of every statistician's toolbox. -- Michael Braun, MIT Sloan School of Management "Seamless R and C++ integration with Rcpp" is simply a wonderful book. For anyone who uses C/C++ and R, it is an indispensable resource. The writing is outstanding. A huge bonus is the section on applications. This section covers the matrix packages Armadillo and Eigen and the GNU Scientific Library as well as RInside which enables you to use R inside C++. These applications are what most of us need to know to really do scientific programming with R and C++. I love this book. -- Robert McCulloch, University of Chicago Booth School of Business Rcpp is now considered an essential package for anybody doing serious computational research using R. Dirk's book is an excellent companion and takes the reader from a gentle introduction to more advanced applications via numerous examples and efficiency enhancing gems. The book is packed with all you might have ever wanted to know about Rcpp, its cousins (RcppArmadillo, RcppEigen .etc.), modules, package development and sugar. Overall, this book is a must-have on your shelf. -- Sanjog Misra, UCLA Anderson School of Management The Rcpp package represents a major leap forward for scientific computations with R. With very few lines of C++ code, one has R's data structures readily at hand for further computations in C++. Hence, high-level numerical programming can be made in C++ almost as easily as in R, but often with a substantial speed gain. Dirk is a crucial person in these developments, and his book takes the reader from the first fragile steps on to using the full Rcpp machinery. A very recommended book! -- Søren Højsgaard, Department of Mathematical Sciences, Aalborg University, Denmark "Seamless R and C++ Integration with Rcpp" provides the first comprehensive introduction to Rcpp. Rcpp has become the most widely-used language extension for R, and is deployed by over one-hundred different CRAN and BioConductor packages. Rcpp permits users to pass scalars, vectors, matrices, list or entire R objects back and forth between R and C++ with ease. This brings the depth of the R analysis framework together with the power, speed, and efficiency of C++. Dirk Eddelbuettel has been a contributor to CRAN for over a decade and maintains around twenty packages. He is the Debian/Ubuntu maintainer for R and other quantitative software, edits the CRAN Task Views for Finance and High-Performance Computing, is a co-founder of the annual R/Finance conference, and an editor of the Journal of Statistical Software. He holds a Ph.D. in Mathematical Economics from EHESS (Paris), and works in Chicago as a Senior Quantitative Analyst.

The C++ Standard Library Datasim Education Bv

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++14/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.

Visual C++ 2008 Pearson Education

This book provides comprehensive coverage of object-oriented programming in Visual C++, including several major integrated case studies: the GradeBook class, the Time class, the Employee class and the potential OOD/UML- the industry-standard object-oriented system modeling language.

Nurse Practitioner Certification Exam Prep Addison-Wesley Professional

The Official Reference Document to OpenGL, Version 1.4 OpenGL is a powerful software interface used to produce high-quality computer-generated images and interactive graphics applications by rendering 2D and 3D geometric objects, bitmaps, and color images. Officially sanctioned by the OpenGL Architecture Review Board (ARB), The OpenGL Reference Manual, Fourth Edition, is the comprehensive and definitive documentation of all core OpenGL functions. This fourth edition has been completely revised and updated for OpenGL Versions 1.3 and 1.4. It features coverage of cube-mapped textures, multisampling, depth textures and shadowing, multitexturing, and register combiners. In addition, this book documents all OpenGL Utility Library functions (GLU 1.3) and the OpenGL extension to the X Window System (GLX 1.3). A comprehensive reference section documents each set of related OpenGL commands. Each reference page contains: A description of the command's parameters The command's effect on rendering and how OpenGL's state is modified Examples References to related functions Errors generated by each function This book also includes a conceptual overview of OpenGL, a summary of commands and routines, a chapter on defined constants and associated commands, and descriptions of the multitexturing and imaging subset ARB extensions. The OpenGL Technical Library provides tutorial and reference books for OpenGL. The Library enables programmers to gain a practical understanding of OpenGL and shows them how to unlock its full potential. Originally developed by SGI, the Library continues to evolve under the auspices of the Architecture Review Board (ARB), an industry consortium responsible for guiding the evolution of OpenGL and related technologies. The OpenGL ARB is composed of leaders in the computer graphics industry: 3DLabs, Apple, ATI, Dell, Evans & Sutherland, Hewlett-Packard, IBM, Intel, Matrox, NVIDIA, SGI, and Sun Microsystems.

C++ Cookbook Packt Publishing Ltd

This title documents a convergence of programming techniques - generic programming, template metaprogramming, object-oriented programming and design patterns. It describes the C++ techniques used in generic programming and implements a number of industrial strength components.

Effective STL Pearson Education

The Boost C++ Libraries Boris Schäling

Generic Programming and the STL Prentice Hall

Filled with dozens of working code examples that illustrate the use of over 40 popular Boost libraries, this book takes you on a tour of Boost, helping you to independently build the libraries from source and use them in your own code. The first half of the book focuses on basic programming interfaces including generic containers and algorithms, strings, resource management, exception safety, and a miscellany of programming utilities that make everyday programming chores easy. Following a short interlude that introduces template metaprogramming and functional programming, the later chapters are devoted to systems programming interfaces, focusing on directory handling, I/O, concurrency, and network programming

Functional Programming in C++ Addison-Wesley Professional

The definitive guide—fully updated for Windows 10 and Windows Server 2016 Delve inside Windows architecture and internals, and see how core components work behind the scenes. Led by a team of internals experts, this classic guide has been fully updated for Windows 10 and Windows Server 2016. Whether you are a developer or an IT professional, you'll get critical, insider perspectives on how Windows operates. And through hands-on experiments, you'll experience its internal behavior firsthand—knowledge you can apply to improve application design, debugging, system performance, and support. This book will help you: · Understand the Window system architecture

and its most important entities, such as processes and threads · Examine how processes manage resources and threads scheduled for execution inside processes · Observe how Windows manages virtual and physical memory · Dig into the Windows I/O system and see how device drivers work and integrate with the rest of the system · Go inside the Windows security model to see how it manages access, auditing, and authorization, and learn about the new mechanisms in Windows 10 and Server 2016

Seamless R and C++ Integration with Rcpp Pearson Education

Summary Functional Programming in C++ teaches developers the practical side of functional programming and the tools that C++ provides to develop software in the functional style. This in-depth guide is full of useful diagrams that help you understand FP concepts and begin to think functionally. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Well-written code is easier to test and reuse, simpler to parallelize, and less error prone. Mastering the functional style of programming can help you tackle the demands of modern apps and will lead to simpler expression of complex program logic, graceful error handling, and elegant concurrency. C++ supports FP with templates, lambdas, and other core language features, along with many parts of the STL. About the Book Functional Programming in C++ helps you unleash the functional side of your brain, as you gain a powerful new perspective on C++ coding. You'll discover dozens of examples, diagrams, and illustrations that break down the functional concepts you can apply in C++, including lazy evaluation, function objects and invocables, algebraic data types, and more. As you read, you'll match FP techniques with practical scenarios where they offer the most benefit. What's inside Writing safer code with no performance penalties Explicitly handling errors through the type system Extending C++ with new control structures Composing tasks with DSLs About the Reader Written for developers with two or more years of experience coding in C++. About the Author Ivan Čukić is a core developer at KDE and has been coding in C++ since 1998. He teaches modern C++ and functional programming at the Faculty of Mathematics at the University of Belgrade. Table of Contents Introduction to functional programming Getting started with functional programming Function objects Creating new functions from the old ones Purity: Avoiding mutable state Lazy evaluation Ranges Functional data structures Algebraic data types and pattern matching Monads Template metaprogramming Functional design for concurrent systems Testing and debugging [Learn OpenGL](#) John Wiley & Sons

"Solutions and examples for C++ programmers"--Cover.

Rigid Body Dynamics Algorithms CRC Press

Geometry processing, or mesh processing, is a fast-growing area of research that uses concepts from applied mathematics, computer science, and engineering to design efficient algorithms for the acquisition, reconstruction, analysis, manipulation, simulation, and transmission of complex 3D models. Applications of geometry processing algorithms already cover a wide range of areas from multimedia, entertainment, and classical computer-aided design, to biomedical computing, reverse engineering, and scientific computing. Over the last several years, triangle meshes have become increasingly popular, as irregular triangle meshes have developed into a valuable alternative to traditional spline surfaces. This book discusses the whole geometry processing pipeline based on triangle meshes. The pipeline starts with data input, for example, a model acquired by 3D scanning techniques. This data can then go through processes of error removal, mesh creation, smoothing, conversion, morphing, and more. The authors detail techniques for those processes using triangle meshes. A supplemental website contains downloads and additional information.

Boost C++ Application Development Cookbook "O'Reilly Media, Inc."

Authored by Roberto Ierusalimschy, the chief architect of the language, this volume covers all aspects of Lua 5---from the basics to its API with C---explaining how to make good use of its features and giving numerous code examples. (Computer Books)

[Introduction to the Boost C++ Libraries](#) Pearson Deutschland GmbH

One of the best languages for the development of financial engineering and instrument pricing applications is C++. This book has several features that allow developers to write robust, flexible and extensible software systems. The book is an ANSI/ISO standard, fully object-oriented and interfaces with many third-party applications. It has support for templates and generic programming, massive reusability using templates (?write once?) and support for legacy C applications. In this book, author Daniel J. Duffy brings C++ to the next level by applying it to the design and implementation of classes, libraries and applications for option and derivative pricing models. He employs modern software engineering techniques to produce industrial-strength

applications: Using the Standard Template Library (STL) in finance Creating your own template classes and functions Reusable data structures for vectors, matrices and tensors Classes for numerical analysis (numerical linear algebra ?) Solving the Black Scholes equations, exact and approximate solutions Implementing the Finite Difference Method in C++ Integration with the ?Gang of Four? Design Patterns Interfacing with Excel (output and Add-Ins) Financial engineering and XML Cash flow and yield curves Included with the book is a CD containing the source code in the Datasim Financial Toolkit. You can use this to get up to speed with your C++ applications by reusing existing classes and libraries. 'Unique... Let's all give a warm welcome to modern pricing tools.' -- Paul Wilmott, mathematician, author and fund manager

[C++17 STL Cookbook](#) Pearson Education

The most widely read and trusted guide to the C++ language, standard library, and design techniques includes significant new updates and two new appendices on internationalization and Standard Library technicalities. It is the only book with authoritative, accessible coverage of every major element of ISO/ANSI Standard C++.

[The C++ Programming Language](#) CRC Press

This report from the Committee on Military Nutrition Research reviews the history of caffeine usage, the metabolism of caffeine, and its physiological effects. The effects of caffeine on physical performance, cognitive function and alertness, and alleviation of sleep deprivation impairments are discussed in light of recent scientific literature. The impact of caffeine consumption on various aspects of health, including cardiovascular disease, reproduction, bone mineral density, and fluid homeostasis are reviewed. The behavioral effects of caffeine are also discussed, including the effect of caffeine on reaction to stress, withdrawal effects, and detrimental effects of high intakes.

Best Sellers - Books :

- [How To Catch A Mermaid By Adam Wallace](#)
- [Love You Forever By Robert Munsch](#)
- [The Untethered Soul: The Journey Beyond Yourself](#)
- [A Court Of Silver Flames \(a Court Of Thorns And Roses, 5\) By Sarah J. Maas](#)
- [The Four Agreements: A Practical Guide To Personal Freedom \(a Toltec Wisdom Book\) By Don Miguel Ruiz](#)
- [Baking Yesteryear: The Best Recipes From The 1900s To The 1980s](#)
- [Twisted Hate \(twisted, 3\)](#)
- [The Legend Of Zelda: Tears Of The Kingdom - The Complete Official Guide: Collector's Edition](#)
- [Fast Like A Girl: A Woman's Guide To Using The Healing Power Of Fasting To Burn Fat, Boost Energy, And Balance Hormones By Dr. Mindy Pelz](#)
- [How To Catch A Leprechaun](#)

The amounts of caffeine found to enhance vigilance and reaction time consistently are reviewed and recommendations are made with respect to amounts of caffeine appropriate for maintaining alertness of military personnel during field operations. Recommendations are also provided on the need for appropriate labeling of caffeine-containing supplements, and education of military personnel on the use of these supplements. A brief review of some alternatives to caffeine is also provided.

[Windows Sysinternals Administrator's Reference](#) Apress

Optimize Windows system reliability and performance with Sysinternals IT pros and power users consider the free Windows Sysinternals tools indispensable for diagnosing, troubleshooting, and deeply understanding the Windows platform. In this extensively updated guide, Sysinternals creator Mark Russinovich and Windows expert Aaron Margosis help you use these powerful tools to optimize any Windows system's reliability, efficiency, performance, and security. The authors first explain Sysinternals' capabilities and help you get started fast. Next, they offer in-depth coverage of each major tool, from Process Explorer and Process Monitor to Sysinternals' security and file utilities. Then, building on this knowledge, they show the tools being used to solve real-world cases involving error messages, hangs, sluggishness, malware infections, and much more. Windows Sysinternals creator Mark Russinovich and Aaron Margosis show you how to: Use Process Explorer to display detailed process and system information Use Process Monitor to capture low-level system events, and quickly filter the output to narrow down root causes List, categorize, and manage software that starts when you start or sign in to your computer, or when you run Microsoft Office or Internet Explorer Verify digital signatures of files, of running programs, and of the modules loaded in those programs Use Autoruns, Process Explorer, Sigcheck, and Process Monitor

features that can identify and clean malware infestations Inspect permissions on files, keys, services, shares, and other objects Use Sysmon to monitor security-relevant events across your network Generate memory dumps when a process meets specified criteria Execute processes remotely, and close files that were opened remotely Manage Active Directory objects and trace LDAP API calls Capture detailed data about processors, memory, and clocks Troubleshoot unbootable devices, file-in-use errors, unexplained communication, and many other problems Understand Windows core concepts that aren't well-documented elsewhere

C++ Template Metaprogramming Addison-Wesley Professional

C++ is one of the most important and influential programming languages for application development. It supports the modular, object-oriented and generic programming models and its flexibility has been one of the main reasons why it has been so successful. With the emergence of the Boost Libraries (www.boost.org) we see that C++ is brought to a new level, namely a set of reusable and modular template libraries that C++ developers can use in their applications. This book is dedicated to a number of Boost libraries for higher-order functions, data types and data structures, libraries for text and string processing, multi-threading, random number generation and more. We also discuss how Boost and design patterns are used to promote the flexibility of code. Each library is described in a step-by-step manner. Numerous examples are given to show the functionality of each library. The full source code is freely available to purchasers of the book. Coverage Includes Understanding and using 30 major Boost libraries. Learn about higher-order functions, data structures, memory management, multi-threading and more. Using Boost in new and existing applications. Integrating Boost and the Gang-Of-Four design patterns. Ready-to-run projects for Visual Studio. Appendices and exercises."