

More Effective C Scott Meyers Beiqinore

"With this book, Ted Neward helps you make the leap from being a good Java enterprise developer to a great developer!" --John Crupi, Sun Distinguished Engineer coauthor, Core J2EE Patterns If you want to build better Java enterprise applications and work more efficiently, look no further. Inside, you will find an accessible guide to the nuances of Java 2 Platform, Enterprise Edition (J2EE) development. Learn how to: Use in-process or local storage to avoid the network, see item 44 Set lower isolation levels for better transactional throughput, see item 35 Use Web services for open integration, see item 22 Consider your lookup carefully, see item 16 Pre-generate content to minimize processing, see item 55 Utilize role-based authorization, see item 63 Be robust in the face of failure, see item 7 Employ independent JREs for side-by-side versioning, see item 69 Ted Neward provides you with 75 easily digestible tips that will help you master J2EE development on a systemic and architectural level. His panoramic look at the good, the bad, and the ugly aspects of J2EE development will address your most pressing concerns. Learn how to design your enterprise systems so they adapt to future demands. Improve the efficiency of your code without compromising its correctness. Discover how to implement sophisticated functionality that is not directly supported by the language or platform. After reading Effective Enterprise Java , you will know how to design and implement better, more scalable enterprise-scope Java software systems.

A pragmatic recipe book for acquiring a comprehensive understanding of the complexities and core fundamentals of C++ programming Key FeaturesExplore the latest language and library features of C++20 such as modules, coroutines, concepts, and rangesShed new light on the core concepts in C++ programming, including functions, algorithms, threading, and concurrency, through practical self-contained recipesLeverage C++ features like smart pointers, move semantics, constexpr, and more for increased robustness and performanceBook Description C++ has come a long way to be one of the most widely used general-purpose languages that is fast, efficient, and high-performance at its core. The updated second edition of Modern C++

Programming Cookbook addresses the latest features of C++20, such as modules, concepts, coroutines, and the many additions to the standard library, including ranges and text formatting. The book is organized in the form of practical recipes covering a wide range of problems faced by modern developers. The book also delves into the details of all the core concepts in modern C++ programming, such as functions and classes, iterators and algorithms, streams and the file system, threading and concurrency, smart pointers and move semantics, and many others. It goes into the performance aspects of programming in depth, teaching developers how to write fast and lean code with the help of best practices. Furthermore, the book explores useful patterns and delves into the implementation of many idioms, including pimpl, named parameter, and attorney-client, teaching techniques such as avoiding repetition with the factory pattern. There is also a chapter dedicated to unit testing, where you are introduced to three of the most widely used libraries for C++: Boost.Test, Google Test, and Catch2. By the end of the book, you will be able to effectively leverage the features and techniques of C++11/14/17/20 programming to enhance the performance, scalability, and efficiency of your applications. What you will learn

- Understand the new C++20 language and library features and the problems they solve
- Become skilled at using the standard support for threading and concurrency for daily tasks
- Leverage the standard library and work with containers, algorithms, and iterators
- Solve text searching and replacement problems using regular expressions
- Work with different types of strings and learn the various aspects of compilation
- Take advantage of the file system library to work with files and directories
- Implement various useful patterns and idioms
- Explore the widely used testing frameworks for C++

Who this book is for The book is designed for entry- or medium-level C++ programmers who have a basic knowledge of C++ and want to master the language and become prolific modern C++ developers. Experienced C++ programmers can leverage this book to strengthen their command of C++ and find a good reference to many language and library features of C++11/14/17/20.

Writing reliable and maintainable C++ software is hard. Designing such software at scale adds a new set of challenges. Creating large-scale systems requires a

practical understanding of logical design – beyond the theoretical concepts addressed in most popular texts. To be successful on an enterprise scale, developers must also address physical design, a dimension of software engineering that may be unfamiliar even to expert developers. Drawing on over 30 years of hands-on experience building massive, mission-critical enterprise systems, John Lakos shows how to create and grow Software Capital. This groundbreaking volume lays the foundation for projects of all sizes and demonstrates the processes, methods, techniques, and tools needed for successful real-world, large-scale development. Up to date and with a solid engineering focus, *Large-Scale C++, Volume I: Process and Architecture*, demonstrates fundamental design concepts with concrete examples. Professional developers of all experience levels will gain insights that transform their approach to design and development by understanding how to

- Raise productivity by leveraging differences between infrastructure and application development
- Achieve exponential productivity gains through feedback and hierarchical reuse
- Embrace the component's role as the fundamental unit of both logical and physical design
- Analyze how fundamental properties of compiling and linking affect component design
- Discover effective partitioning of logical content in appropriately sized physical aggregates
- Internalize the important differences among sufficient, complete, minimal, and primitive software
- Deliver solutions that simultaneously optimize encapsulation, stability, and performance
- Exploit the nine established levelization techniques to avoid cyclic physical dependencies
- Use lateral designs judiciously to avoid the "heaviness" of conventional layered architectures
- Employ appropriate architectural insulation techniques for eliminating compile-time coupling
- Master the multidimensional process of designing large systems using component-based methods

This is the first of John Lakos's three authoritative volumes on developing large-scale systems using C++. This book, written for fellow software practitioners, uses familiar C++ constructs to solve real-world problems while identifying (and motivating) modern C++ alternatives. Together with the forthcoming *Volume II: Design and Implementation* and *Volume III: Verification and Testing*, *Large-Scale C++* offers comprehensive guidance for all

aspects of large-scale C++ software development. If you are an architect or project leader, this book will empower you to solve critically important problems right now – and serve as your go-to reference for years to come. Register your book for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Presents a collection of tips for programmers on ways to improve programming skills.

The C++ Programming Language

Learn Mac OS X Snow Leopard

The Principles and Art of Successful Business Coaching

More Exceptional C++

Real-Time C++

85 Specific Ways to Improve Your Programs and Designs

40 New Engineering Puzzles, Programming Problems, and Solutions

Learn how to program using the updated C++17 language. You'll start with the basics and progress through step-by-step examples to become a working C++ programmer. All you need are Beginning C++17 and any recent C++ compiler and you'll soon be writing real C++ programs. There is no assumption of prior programming knowledge. All language concepts that are explained in the book are illustrated with working program examples, and all chapters include exercises for you to test and practice your knowledge. Code downloads are provided for all examples from the text and solutions to the exercises. This latest edition has been fully updated to the latest version of the language, C++17, and to all conventions and best practices of so-called modern C++. Beginning C++17 also introduces the elements of the C++ Standard Library that provide essential support for the C++17 language. What You'll Learn Define variables and make decisions Work with arrays and loops, pointers and references, strings, and more Write your own functions, types, and operators Discover the essentials of object-oriented programming Use overloading, inheritance, virtual functions and polymorphism Write generic function templates and class templates Get up to date with modern C++ features: auto type declarations, move semantics, lambda expressions, and more Examine the new additions to C++17 Who This Book Is For Programmers new to C++ and those who may be looking for a refresh primer on the C++17 programming language in general.

C++ is one of the most widely-used programming languages and has applications in a variety of fields, such as gaming, GUI programming, and operating systems, to name a few. Through the years, C++ has evolved into (and remains) one of the top choices for software developers worldwide. This book will show you some notable C++ features and how to ...

Mac OS X Leopard: Beyond the Manual is written for the sophisticated computer user who would find an introductory manual tedious. Features new to Leopard are emphasized, as are complex features that, though available in earlier versions of OS X, were not readily accessible. The narrative is fast-paced, concise, and respectful of the reader's familiarity with earlier versions of the program.

A comprehensive guide to help aspiring and professional C++ developers elevate the performance of their apps by allowing them to run faster and consume fewer resources
Key Features
Updated to C++20 with completely revised code and more content on error handling, benchmarking, memory allocators, and concurrent programming
Explore the latest C++20 features including concepts, ranges, and coroutines
Utilize C++ constructs and techniques to carry out effective data structure optimization and memory management
Book Description
C++ High Performance, Second Edition guides you through optimizing the performance of your C++ apps. This allows them to run faster and consume fewer resources on the device they're running on without compromising the readability of your codebase. The book begins by introducing the C++ language and some of its modern concepts in brief. Once you are familiar with the fundamentals, you will be ready to measure, identify, and eradicate bottlenecks in your C++ codebase. By following this process, you will gradually improve your style of writing code. The book then explores data structure optimization, memory management, and how it can be used efficiently concerning CPU caches. After laying the foundation, the book trains you to leverage algorithms, ranges, and containers from the standard library to achieve faster execution, write readable code, and use customized iterators. It provides hands-on examples of C++ metaprogramming, coroutines, reflection to reduce boilerplate code, proxy objects to perform optimizations under the hood, concurrent programming, and lock-free data structures. The book concludes with an overview of parallel algorithms. By the end of this book, you will have the ability to

use every tool as needed to boost the efficiency of your C++ projects. What you will learn
Write specialized data structures for performance-critical code
Use modern metaprogramming techniques to reduce runtime calculations
Achieve efficient memory management using custom memory allocators
Reduce boilerplate code using reflection techniques
Reap the benefits of lock-free concurrent programming
Gain insights into subtle optimizations used by standard library algorithms
Compose algorithms using ranges library
Develop the ability to apply metaprogramming aspects such as constexpr, constraints, and concepts
Implement lazy generators and asynchronous tasks using C++20 coroutines
Who this book is for
If you're a C++ developer looking to improve the efficiency of your code or just keen to upgrade your skills to the next level, this book is for you.

52 Specific Ways to Improve Your iOS and OS X Programs

Effective C++

Effective C++ Digital Collection

C++ Coding Standards

Generic Programming and Design Patterns Applied

Imperfect C++

How to become a great business coach and get the best out of your people.

Presents a collection of tips for programmers on how to use the features of C++11 and C++14 effectively, covering such topics as functions, rvalue references, and lambda expressions.

The Best-Selling C++ Resource Now Updated for C++11 The C++ standard library provides a set of common classes and interfaces that greatly extend the core C++ language. The library, however, is not self-explanatory. To make full use of its components—and to benefit from their power—you need a resource that does far more than list the classes and their functions. The *C++ Standard Library: A Tutorial and Reference, Second Edition*, describes this library as now incorporated into the new ANSI/ISO C++ language standard (C++11). The book provides comprehensive documentation of each library component, including an introduction to its purpose and design; clearly written explanations of complex concepts; the practical programming details needed for effective use; traps and pitfalls; the exact signature and definition of the most important classes and functions; and numerous examples of working code. The book focuses in particular on the Standard Template Library (STL), examining containers, iterators, function objects, and STL algorithms. The book covers all the new C++11 library components, including Concurrency Fractional arithmetic Clocks and timers Tuples New STL containers New STL algorithms New smart pointers New locale facets Random numbers and distributions Type traits and utilities Regular expressions The book also examines the new C++ programming style and its effect on the standard library, including lambdas, range-based for loops, move semantics, and variadic templates. An accompanying Web site, including source code, can be found at www.cppstdlib.com.

Apply business requirements to IT infrastructure and deliver a high-quality product by understanding architectures such as microservices, DevOps, and cloud-native using modern C++ standards and features Key Features Design scalable large-scale applications with the C++

programming language Architect software solutions in a cloud-based environment with continuous integration and continuous delivery (CI/CD) Achieve architectural goals by leveraging design patterns, language features, and useful tools
Book Description Software architecture refers to the high-level design of complex applications. It is evolving just like the languages we use, but there are architectural concepts and patterns that you can learn to write high-performance apps in a high-level language without sacrificing readability and maintainability. If you're working with modern C++, this practical guide will help you put your knowledge to work and design distributed, large-scale apps. You'll start by getting up to speed with architectural concepts, including established patterns and rising trends, then move on to understanding what software architecture actually is and start exploring its components. Next, you'll discover the design concepts involved in application architecture and the patterns in software development, before going on to learn how to build, package, integrate, and deploy your components. In the concluding chapters, you'll explore different architectural qualities, such as maintainability, reusability, testability, performance, scalability, and security. Finally, you will get an overview of distributed systems, such as service-oriented architecture, microservices, and cloud-native, and understand how to apply them in application development. By the end of this book, you'll be able to build distributed services using modern C++ and associated tools to deliver solutions as per your clients' requirements. What you will learn Understand how to apply the principles of software architecture Apply design patterns and best practices to meet your architectural goals Write elegant, safe, and performant code using the latest C++ features Build applications that are easy to maintain and deploy Explore the different architectural approaches and learn to apply them as per your requirement Simplify development and operations using application containers Discover various techniques to solve common problems in software design and development Who this book is for This software architecture C++ programming book is for experienced C++ developers looking to become software architects or develop enterprise-grade applications.

Efficient Object-Oriented and Template Microcontroller Programming

Become an expert programmer by solving real-world problems

Process and Architecture

Mac OS X Leopard

A Fast-Paced Introduction

Beginning C++17

Effective Enterprise Java

Corpus linguistics is a research approach to investigate the patterns of language use empirically, based on analysis of large collections of natural texts. While corpus-based analysis has had relatively little influence on theoretical linguistics, it has revolutionized the study of language variation and use: what speakers and writers actually do with the lexical and grammatical resources of a language. Corpus-based research employs the research methods of quantitative and qualitative social science to investigate language use patterns empirically. This four-volume collection is organized around linguistic research questions that can be investigated from a corpus perspective and includes amongst others studies of individual words, comparisons of supposedly synonymous words, studies of grammatical variation, and sociolinguistic studies of dialects, registers, styles, and world varieties. Corpus-based analysis has also proven to be important for the study of historical change.

This is the eBook version of the printed book. C++'s Standard Template Library is revolutionary, but learning to use it well has always been a challenge. Until now. In this book, best-selling author Scott Meyers (*Effective C++*, and *More Effective C++*) reveals the critical rules of thumb employed by the experts - the things they almost always do or almost always avoid doing - to get the most out of the library. Other books describe what's in the STL. *Effective STL* shows you . Each of the book's 50 guidelines is backed by Meyers' legendary

analysis and incisive examples, so you'll learn not o.

Write Truly Great iOS and OS X Code with Objective-C 2.0! Effective Objective-C 2.0 will help you harness all of Objective-C's expressive power to write OS X or iOS code that works superbly well in production environments. Using the concise, scenario-driven style pioneered in Scott Meyers' best-selling Effective C++, Matt Galloway brings together 52 Objective-C best practices, tips, shortcuts, and realistic code examples that are available nowhere else. Through real-world examples, Galloway uncovers little-known Objective-C quirks, pitfalls, and intricacies that powerfully impact code behavior and performance. You'll learn how to choose the most efficient and effective way to accomplish key tasks when multiple options exist, and how to write code that's easier to understand, maintain, and improve. Galloway goes far beyond the core language, helping you integrate and leverage key Foundation framework classes and modern system libraries, such as Grand Central Dispatch. Coverage includes Optimizing interactions and relationships between Objective-C objects Mastering interface and API design: writing classes that feel "right at home" Using protocols and categories to write maintainable, bug-resistant code Avoiding memory leaks that can still occur even with Automatic Reference Counting (ARC) Writing modular, powerful code with Blocks and Grand Central Dispatch Leveraging differences between Objective-C protocols and multiple inheritance in other languages Improving code by more effectively using arrays, dictionaries, and sets Uncovering surprising power in the Cocoa and Cocoa Touch frameworks Presents a collection of reusable design artifacts, called generic components, together with the techniques that make them possible. The author describes techniques for policy-based design, partial template specialization, typelists, and local classes, then goes on to implement generic components for smart pointers, object factories, functor objects, the Visitor design pattern, and multimethod engines. c. Book News Inc.

Master C++ core language and standard library features, with over 100 recipes, updated to C++20, 2nd Edition

C++ Primer

Effective Objective-C 2.0

C++ Common Knowledge

Effective Modern C++

A Tutorial and Reference

140 Ways to Improve Your Programming

Coming to grips with C++11 and C++14 is more than a matter of familiarizing yourself with the features they introduce (e.g., auto type declarations, move semantics, lambda expressions, and concurrency support). The challenge is learning to use those features effectively—so that your software is correct, efficient, maintainable, and portable. That's where this practical book comes in. It describes how to write truly great software using C++11 and C++14—i.e. using modern C++. Topics include: The pros and cons of braced initialization, noexcept specifications, perfect forwarding, and smart pointer make functions The relationships among std::move, std::forward, rvalue references, and universal references Techniques for writing clear, correct, effective lambda expressions How std::atomic differs from volatile, how each should be used, and how they relate to C++'s concurrency API How best practices in "old" C++ programming (i.e., C++98) require revision for software development in modern C++ Effective Modern C++ follows the proven guideline-based, example-driven format of Scott Meyers' earlier books, but covers entirely new material. "After I learned the C++ basics, I then learned how to use C++ in production code from Meyer's series of Effective C++ books. Effective Modern

C++ is the most important how-to book for advice on key guidelines, styles, and idioms to use modern C++ effectively and well. Don't own it yet? Buy this one. Now". -- Herb Sutter, Chair of ISO C++ Standards Committee and C++ Software Architect at Microsoft

The historic journey of Barack and Michelle Obama to the White House is memorialized in this fun yet fashionable paper doll book featuring the Obamas. For the millions who can't get enough of this remarkable first family, here's a book containing perforated press-out dolls of Barack and Michelle and over 30 mix-and-match coordinated outfits and accessories featuring the Obamas: —on vacation in Hawaii — golfing at Camp David — on election night — at the extraordinary inauguration and Inaugural Ball — traveling the world on foreign affairs trip — rolling up their sleeves for a day of service plus much more! Highlighting Barack's uniquely professional, yet down-to-earth wardrobe that reflects his popular persona and Michelle's outstanding taste in fashion, this book is a must for anyone wanting that special "yes we can" kind of day, every day.

Learn key topics such as language basics, pointers and pointer arithmetic, dynamic memory management, multithreading, and network programming. Learn how to use the compiler, the make tool, and the archiver.

Finally, a great introduction to ANCI C++ for working programmers! Lippmann--who worked under the leadership of Bjarne Stroustrup, wrote the classic "C++ Primer", and now works as a C++ programmer at DreamWorks--teaches programmers exactly what they need to know to get immediate results. From start to finish, each concept and technique is presented through real programs designed to solve the problems C++ programmers are most likely to encounter.

35 New Ways to Improve Your Programs and Designs

Software Architecture with C++

Head First C

Large-Scale C++ Volume I

Practical Solutions for Real-life Programming

More Effective C+

Effective C++ Cd

Offers information on using the C++ programming language using the new C++11 standard, covering such topics as concurrency, facilities, standard libraries, and design techniques.

Effective C++ 50 Specific Ways to Improve Your Programs and Designs Addison-Wesley Professional

Scott Meyers's seminal C++ books-- Effective C++ , More Effective C++ , and Effective STL --have been immensely helpful to hundreds of thousands of C++ programmers. All three are finally available together in this eBook collection. Effective C++ has been embraced by hundreds of thousands of programmers worldwide. The reason is clear: Scott Meyers's practical approach to C++ describes the rules of thumb used by the experts to produce clear, correct, efficient code. The book is organized around 55 specific guidelines, each of which describes a way to write better C++. Each is backed by concrete examples. In More Effective C++, Meyers presents 35 ways to improve your

programs and designs. Drawing on years of experience, Meyers explains how to write software that is more effective: more efficient, more robust, more consistent, more portable, and more reusable. In short, how to write C++ software that's just plain better. In *Effective STL*, Meyers goes beyond describing what's in the STL to show you how to use it. Each of the book's 50 guidelines is backed by Meyers's legendary analysis and incisive examples, so you'll learn not only what to do, but also when to do it—and why. Together in this collection, these books include the following important features: Expert guidance on the design of effective classes, functions, templates, and inheritance hierarchies. Applications of new “TR1” standard library functionality, along with comparisons to existing standard library components. Insights into differences between C++ and other languages (e.g., Java, C#, C) that help developers from those languages assimilate “the C++ way” of doing things. Proven methods for improving program efficiency, including incisive examinations of the time/space costs of C++ language features Comprehensive descriptions of advanced techniques used by C++ experts, including placement new, virtual constructors, smart pointers, reference counting, proxy classes, and double-dispatching Examples of the profound impact of exception handling on the structure and behavior of C++ classes and functions Practical treatments of new language features, including `bool`, `mutable`, `explicit`, namespaces, member templates, the Standard Template Library, and more. If your compilers don't yet support these features, Meyers shows you how to get the job done without them. Advice on choosing among standard STL containers (like `vector` and `list`), nonstandard STL containers (like `hash_set` and `hash_map`), and non-STL containers (like `bitset`). Techniques to maximize the efficiency of the STL and the programs that use it. Insights into the behavior of iterators, function objects, and allocators, including things you should not do. Guidance for the proper use of algorithms and member functions whose names are the same (e.g., `find`), but whose actions differ in subtle (but important) ways. Discussions of potential portability problems, including straightforward ways to avoid them.

"This is *Effective C++* volume three - it's really that good." - Herb Sutter, independent consultant and secretary of the ISO/ANSI C++ standards committee "There are very few books which all C++ programmers must have. Add *Effective STL* to that list." - Thomas Becker, Senior Software Engineer, Zephyr Associates, Inc., and columnist, *C/C++ Users Journal* C++'s Standard Template Library is revolutionary, but learning to use it well has always been a challenge. Until now. In this book, best-selling author Scott Meyers (*Effective C++* , and *More Effective C++*) reveals the critical rules of thumb employed by the experts - the things they almost always do or almost always avoid doing - to get the most out of the library. Other books describe what's in the STL. *Effective STL* shows you how to use it. Each of the book's 50 guidelines is backed by Meyers' legendary analysis and incisive examples, so you'll learn not only what to do, but also when to do it - and why. Highlights of *Effective STL* include: Advice on choosing among standard STL containers (like `vector` and `list`), nonstandard STL containers (like `hash_set` and `hash_map`), and non-STL containers (like `bitset`). Techniques to maximize the efficiency of the STL and the programs that use it. Insights into the behavior of iterators, function objects, and allocators, including things you should not do. Guidance for the proper use

of algorithms and member functions whose names are the same (e.g., find), but whose actions differ in subtle (but important) ways. Discussions of potential portability problems, including straightforward ways to avoid them. Like Meyers' previous books, *Effective STL* is filled with proven wisdom that comes only from experience. Its clear, concise, penetrating style makes it an essential resource for every STL programmer.

C++ High Performance

Modern C++ Programming Cookbook

50 Specific Ways to Improve Your Use of the Standard Template Library

The C++ Standard Library

Effective STL

Large-scale C++ Software Design

Avoiding Common Problems in Coding and Design

Effective Contemporary C++ follows the confirmed guideline-based, example-driven structure of Scott Meyers' previously guides, but includes entirely new content. After I discovered the C++ fundamentals, I then discovered how to use C++ in manufacturing rule from Meyer's group of *Effective C++* guides. *Effective Contemporary C++* is the most essential how-to guide for tips on key recommendations, designs, and idioms to use modern C++ successfully and well. Don't own it yet? Buy this one. Coming to holds with C++11 and C++14 is more than a issue of familiarizing yourself with the options they present (e.g., automatic kind conditions, shift semantics, lambda expression, and concurrency support). The task is understanding how to use those functions effectively so that your application is appropriate, efficient, maintainable, and convenient. That's where this realistic guide comes in. It explains how to create truly excellent application using C++11 and C++14 i.e. using modern C++.

Includes the text of *Effective C++*, Second Edition, and *More Effective C++*, and a collection of C++ magazine articles. This CD serves as a useful resource for any programmer who wants to learn C++.

Meyers provides 50 short, specific, easy-to-remember guidelines that experienced C++ programmers either almost always do or almost always avoid. These rules are each followed by an explanation of the rule's important advice on how to implement it, and are supported by actual programming examples.

Consistent, high-quality coding standards improve software quality, reduce time-to-market, promote teamwork, eliminate time wasted on inconsequential matters, and simplify maintenance. Now, two of the world's most respected C++ experts distill the rich collective experience of the global C++ community into a set of coding standards that every developer and development team can understand and use as a basis for their own coding standards. The authors cover virtually every facet of C++ programming: design and coding style, functions, operators, class design, inheritance, construction/destruction, copying, assignment, namespaces, modules, templates, genericity, exceptions, STL containers and algorithms, and more. Each standard is described concisely, with practical examples. From type definition to error handling, this book presents C++ best practices, including some that have only recently been identified and standardized-techniques you may not know even if you've used C++ for years. Along the way, you'll find answers to questions like What's worth standardizing--and what isn't? What are the best ways to code for scalability? What are the elements of a rational error handling policy? How (and why) do you avoid unnecessary initialization, cyclic, and definitional dependencies? When (and how) should you use static and dynamic polymorphism together? How do you practice "safe" overriding? When should you provide a no-fail swap? Why and how should you prevent exceptions from propagating across module boundaries? Why shouldn't you write namespace declarations or directives in a header file? Why should

you use STL vector and string instead of arrays? How do you choose the right STL search or sort algorithm? What rules should you follow to ensure type-safe code? Whether you're working alone or with others, C++ Coding Standards will help you write cleaner code--and write it faster, with fewer hassles and less frustration.

Master the art of optimizing the functioning of your C++ code, 2nd Edition

Effective Modern Coaching

A Brain-Friendly Guide

C++ Crash Course

Essential Intermediate Programming

Modern C++ Design

From Novice to Professional

More Exceptional C++ continues where Herb Sutter's best-selling Exceptional C++ left off, delivering 40 puzzles that illuminate the most challenging -- and most powerful -- aspects of C++. More Exceptional C++ offers many new puzzles focused on generic programming and the C++ Standard Template Library, including important techniques such as traits and predicates, as well as key considerations in using standard containers and algorithms -- many of them never covered elsewhere. More Exceptional C++ contains a detailed new section (and two appendices) on optimization in single- and multithreaded environments. It also provides important new insights on crucial topics first introduced in Exceptional C++, including exception safety, generic programming, and memory management. For all C++ programmers. The C++11 standard allows programmers to express ideas more clearly, simply, and directly, and to write faster, more efficient code. Bjarne Stroustrup, the designer and original implementer of C++, thoroughly covers the details of this language and its use in his definitive reference, The C++ Programming Language, Fourth Edition. In A Tour of C++ , Stroustrup excerpts the overview chapters from that complete reference, expanding and enhancing them to give an experienced programmer--in just a few hours--a clear idea of what constitutes modern C++. In this concise, self-contained guide, Stroustrup covers most major language features and the major standard-library components--not, of course, in great depth, but to a level that gives programmers a meaningful overview of the language, some key examples, and practical help in getting started. Stroustrup presents the C++ features in the context of the programming styles they support, such as object-oriented and generic programming. His tour is remarkably comprehensive. Coverage begins with the basics, then ranges widely through more advanced topics, including many that are new in C++11, such as move semantics, uniform initialization, lambda expressions, improved containers, random numbers, and concurrency. The tour ends with a discussion of the design and evolution of C++ and the extensions added for C++11. This guide does not aim to teach you how to program (see Stroustrup's Programming: Principles and Practice Using C++ for that); nor will it be the only resource you'll need for C++ mastery (see Stroustrup's The C++ Programming Language, Fourth Edition, for that). If, however, you are a C or C++ programmer wanting greater familiarity with the current C++ language, or a programmer versed in another language wishing to gain an accurate picture of the nature and benefits of modern C++, you can't find a shorter or simpler introduction than this tour provides.

This is the eBook version of nthe printed book. From the author of the indispensable Effective C++, here are 35 new ways to improve your programs and designs. Drawing on years of experience, Meyers explains how to write software that is more effective: more efficient, more robust, more consistent, more portable, and more reusable. In short, how to write C++ software that's just plain better. More Effective C++ includes: Proven methods for improving program

efficiency, including incisive examinations of the time/space costs of C++ language features
Comprehensive descriptions of advanced techn.

Effective C++ has been updated to reflect the latest ANSI/ISO standards. The author, a recognised authority on C++, shows readers fifty ways to improve their programs and designs.

More Effective C++

42 Specific Ways to Improve Your Use of C++11 and C++14

Effective STL.

Essential C++

The Modern C++ Challenge

50 Specific Ways to Improve Your Programs and Designs

55 Specific Ways to Improve Your Programs and Designs

What Every Professional C++ Programmer Needs to Know—Pared to Its Essentials So It Can Be Efficiently and Accurately Absorbed C++ is a large, complex language, and learning it is never entirely easy. But some concepts and techniques must be thoroughly mastered if programmers are ever to do professional-quality work. This book cuts through the technical details to reveal what is commonly understood to be absolutely essential. In one slim volume, Steve Dewhurst distills what he and other experienced managers, trainers, and authors have found to be the most critical knowledge required for successful C++ programming. It doesn't matter where or when you first learned C++. Before you take another step, use this book as your guide to make sure you've got it right! This book is for you if You're no "dummy," and you need to get quickly up to speed in intermediate to advanced C++ You've had some experience in C++ programming, but reading intermediate and advanced C++ books is slow-going You've had an introductory C++ course, but you've found that you still can't follow your colleagues when they're describing their C++ designs and code You're an experienced C or Java programmer, but you don't yet have the experience to develop nuanced C++ code and designs You're a C++ expert, and you're looking for an alternative to answering the same questions from your less-experienced colleagues over and over again C++ Common Knowledge covers essential but commonly misunderstood topics in C++ programming and design while filtering out needless complexity in the discussion of each topic. What remains is a clear distillation of the essentials required for production C++ programming, presented in the author's trademark incisive, engaging style.

Software -- Programming Languages.

Bestselling Programming Tutorial and Reference Completely Rewritten for the New C++11 Standard Fully updated and recast for the newly released C++11 standard, this authoritative and comprehensive introduction to C++ will help you to learn the language fast, and to use it in modern, highly effective ways.

Highlighting today's best practices, the authors show how to use both the core language and its standard library to write efficient, readable, and powerful code. C++ Primer, Fifth Edition, introduces the C++ standard library from the outset, drawing on its common functions and facilities to help you write useful programs without first having to master every language detail. The book's many examples have been revised to use the new language features and demonstrate how to make the best use of them. This book is a proven tutorial for those new to C++, an authoritative discussion of core C++ concepts and techniques, and a valuable resource for experienced programmers, especially those eager to see C++11 enhancements illuminated. Start Fast and Achieve More Learn how to use the new C++11 language features and the standard library to build robust programs quickly, and get comfortable with high-level programming Learn through examples that illuminate today's best coding styles and program design techniques Understand the "rationale behind the rules": why C++11 works as it does Use the extensive crossreferences to help you connect related concepts and insights Benefit from up-to-date learning aids and exercises that emphasize key points, help you to avoid pitfalls, promote good practices, and reinforce what you've learned Access the source code for the extended examples from informit.com/title/0321714113 C++ Primer, Fifth Edition, features an enhanced, layflat binding, which allows the book to stay open more easily when placed on a flat surface. This special binding method—notable by a small space inside the spine—also increases durability.

A fast-paced, thorough introduction to modern C++ written for experienced programmers. After reading C++ Crash Course, you'll be proficient in the core language concepts, the C++ Standard Library, and the Boost Libraries. C++ is one of the most widely used languages for real-world software. In the hands of a knowledgeable programmer, C++ can produce small, efficient, and readable code that any programmer would be proud of. Designed for intermediate to advanced programmers, C++ Crash Course cuts through the weeds to get you straight to the core of C++17, the most modern revision of the ISO standard. Part 1 covers the core of the C++ language, where you'll learn about everything from types and functions, to the object life cycle and expressions. Part 2 introduces you to the C++ Standard Library and Boost Libraries, where you'll learn about all of the high-quality, fully-featured facilities available to you. You'll cover special utility classes, data structures, and algorithms, and learn how to manipulate file systems and build high-performance programs that communicate over networks. You'll learn all the major

features of modern C++, including:

- Fundamental types, reference types, and user-defined types
- The object lifecycle including storage duration, memory management, exceptions, call stacks, and the RAII paradigm
- Compile-time polymorphism with templates and run-time polymorphism with virtual classes
- Advanced expressions, statements, and functions
- Smart pointers, data structures, dates and times, numerics, and probability/statistics facilities
- Containers, iterators, strings, and algorithms
- Streams and files, concurrency, networking, and application development

With well over 500 code samples and nearly 100 exercises, C++ Crash Course is sure to help you build a strong C++ foundation.

A Tour of C++

Beyond the Manual

Design modern systems using effective architecture concepts, design patterns, and techniques with C++20

C++ Gotchas

101 Rules, Guidelines, and Best Practices

“Every C++ professional needs a copy of Effective C++. It is an absolute must-read for anyone thinking of doing serious C++ development. If you’ve never read Effective C++ and you think you know everything about C++, think again.” — Steve Schirripa, Software Engineer, Google

“C++ and the C++ community have grown up in the last fifteen years, and the third edition of Effective C++ reflects this. The clear and precise style of the book is evidence of Scott’s deep insight and distinctive ability to impart knowledge.” — Gerhard Kreuzer, Research and Development Engineer, Siemens AG

The first two editions of Effective C++ were embraced by hundreds of thousands of programmers worldwide. The reason is clear: Scott Meyers’ practical approach to C++ describes the rules of thumb used by the experts — the things they almost always do or almost always avoid doing — to produce clear, correct, efficient code. The book is organized around 55 specific guidelines, each of which describes a way to write better C++. Each is backed by concrete examples. For this third edition, more than half the content is new, including added chapters on managing resources and using templates. Topics from the second edition have been extensively revised to reflect modern design considerations, including exceptions, design patterns, and multithreading. Important features of Effective C++ include: Expert guidance on the design of effective classes, functions, templates, and inheritance hierarchies. Applications of new “TR1” standard library functionality, along with comparisons to existing standard library components. Insights into differences between C++ and other languages (e.g., Java, C#, C) that help developers from those languages assimilate “the C++ way” of doing things.

With this book, Christopher Kormanyos delivers a highly practical guide to programming real-time embedded microcontroller systems in C++. It is divided into three parts plus several appendices. Part I provides a foundation for real-time C++ by covering language technologies, including object-oriented methods, template programming and optimization. Next, part II presents detailed descriptions of a variety of C++ components that are widely used in microcontroller programming. It details some of C++’s most powerful language

elements, such as class types, templates and the STL, to develop components for microcontroller register access, low-level drivers, custom memory management, embedded containers, multitasking, etc. Finally, part III describes mathematical methods and generic utilities that can be employed to solve recurring problems in real-time C++. The appendices include a brief C++ language tutorial, information on the real-time C++ development environment and instructions for building GNU GCC cross-compilers and a microcontroller circuit. For this third edition, the most recent specification of C++17 in ISO/IEC 14882:2017 is used throughout the text. Several sections on new C++17 functionality have been added, and various others reworked to reflect changes in the standard. Also several new sample projects are introduced and existing ones extended, and various user suggestions have been incorporated. To facilitate portability, no libraries other than those specified in the language standard itself are used. Efficiency is always in focus and numerous examples are backed up with real-time performance measurements and size analyses that quantify the true costs of the code down to the very last byte and microsecond. The target audience of this book mainly consists of students and professionals interested in real-time C++. Readers should be familiar with C or another programming language and will benefit most if they have had some previous experience with microcontroller electronics and the performance and size issues prevalent in embedded systems programming.

More than 150,000 copies in print! Praise for Scott Meyers' first book, Effective C++: "I heartily recommend Effective C++ to anyone who aspires to mastery of C++ at the intermediate level or above." - The C/C++ User's Journal From the author of the indispensable Effective C++, here are 35 new ways to improve your programs and designs. Drawing on years of experience, Meyers explains how to write software that is more effective: more efficient, more robust, more consistent, more portable, and more reusable. In short, how to write C++ software that's just plain better. More Effective C++ includes: Proven methods for improving program efficiency, including incisive examinations of the time/space costs of C++ language features Comprehensive descriptions of advanced techniques used by C++ experts, including placement new, virtual constructors, smart pointers, reference counting, proxy classes, and double-dispatching Examples of the profound impact of exception handling on the structure and behavior of C++ classes and functions Practical treatments of new language features, including bool, mutable, explicit, namespaces, member templates, the Standard Template Library, and more. If your compilers don't yet support these features, Meyers shows you how to get the job done without them. More Effective C++ is filled with pragmatic, down-to-earth advice you'll use every day. Like Effective C++ before it, More Effective C++ is essential reading for anyone working with C++.

You're smart and savvy, but also busy. This comprehensive guide to Apple's Mac OS X 10.6, Snow Leopard, gives you everything you need to know to live a happy, productive Mac life. Learn Mac OS X Snow Leopard will have you up and connected lickity-split. With a minimum of overhead and a maximum of useful information, you'll cover a lot of ground in the time it takes other books to get you plugged in. If this isn't your first experience with Mac OS X, skip right to the "What's New in Snow Leopard" sections. You may also find yourself using this book as a quick refresher course or a way to learn new Mac skills you've never tried before.