C++ Training

Literature

Klaus Iglberger

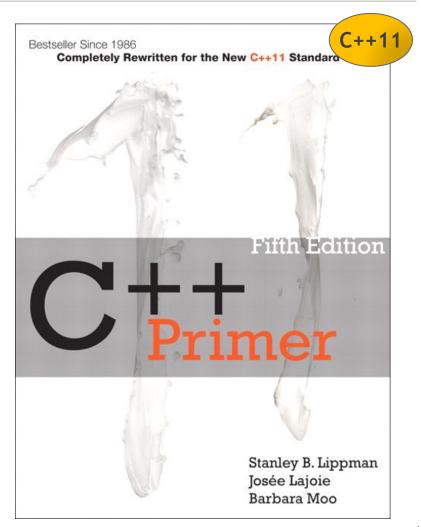
Content

- 1. C++ Primers and References
- 2. Advanced C++ Programming
- 3. C++ Software Design
- 4. Refactoring and Testing
- 5. Performance Optimization
- 6. Professional Programming

1. C++ Primers and References

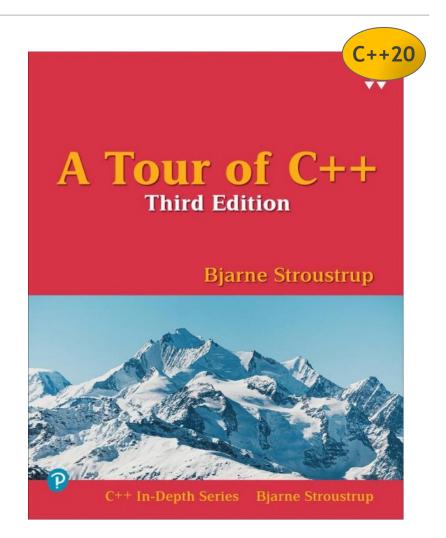
C++ Primer

- Very well written introduction to C++
- Completely rewritten for C++11
- Proper introduction of C++ concepts and idioms
- ISBN-10: 9780321714114
- ISBN-13: 978-0321714114



A Tour of C++

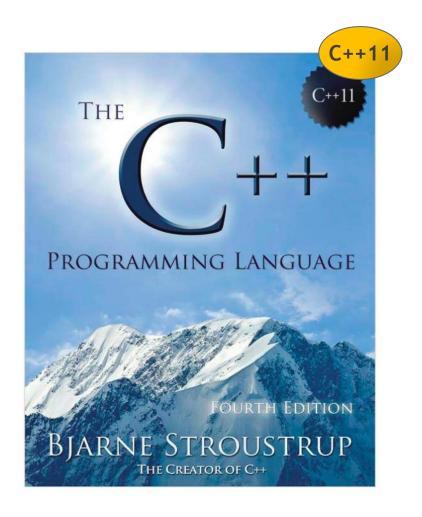
- Great overview of C++20
- Excellent opportunity to upgrade your C++ knowledge (only 299 pages)
- From the inventor of C++ himself
- ISBN-10: 0136816487
- ISBN-13: 978-0136816485



The C++ Programming Language

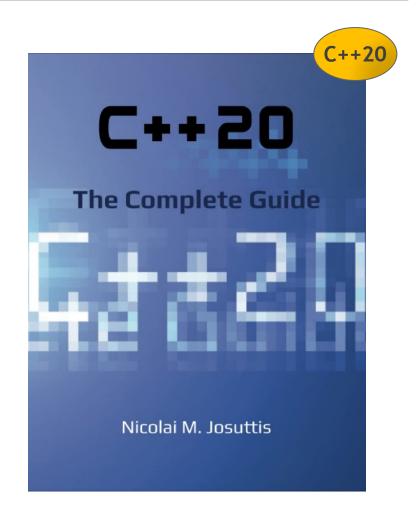
- C++11 introduction by the inventor of C++ himself
- Contains all details in a terse form
- More suited as a reference for the advanced and professional programmer

• ISBN-10: 0321958322



C++20 - The Complete Guide

- A complete overview of C++20, introduced by an expert
- Contains all the features of C++20, including code examples
- Best introduction to C++20 polymorphic memory resources
- Detailed introduction to C++20 ranges
- ISBN-10: 396730020X
- ISBN-13: 978-3967300208

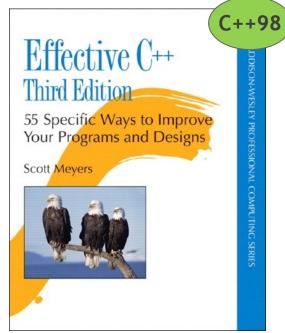


2. Advanced C++ Programming

Effective C++

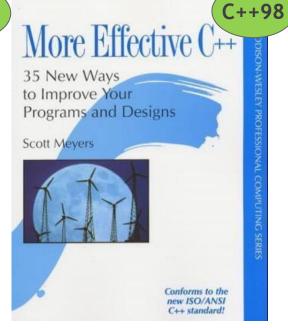
- The classic book on better software design with C++
- Many language details, good explanations and examples
- "Must-read" for every serious C++ programmer

Basis for a special set of Lint warnings



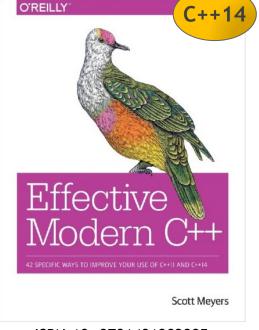
ISBN-10: 0321334876

• ISBN-13: 978-0321334879



• ISBN-10: 020163371X

ISBN-13: 978-0201633719



• ISBN-10: 9781491903995

Effective STL

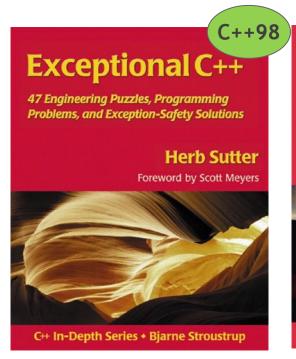
- 2nd successor of Effective C++
- Introduces proper use of the S(T)L
- Also a "must-read" for every C++ programmer
- ISBN-10: 0201749629
- ISBN-13: 978-0201749625



C++98

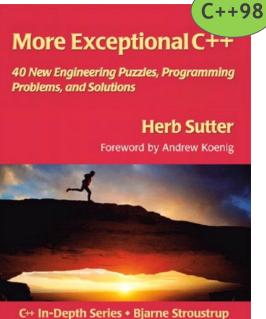
Exceptional C++

- Highly informative and entertaining
- Same item-based structure as Effective C++
- "Must-read" for every serious C++ programmer

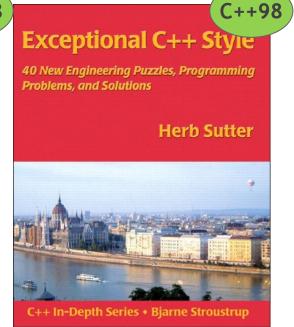


ISBN-10: 0201615622

ISBN-13: 978-0201615623



ISBN-10: 020170434X
 ISBN-13: 978-0201704341

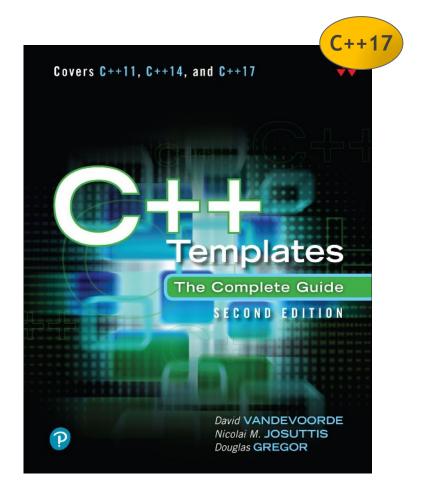


• ISBN-10: 0201760428

C++ Templates - The Complete Guide

- The book on C++ templates
- Contains all details about all aspects of template programming
- Highly recommended as reference

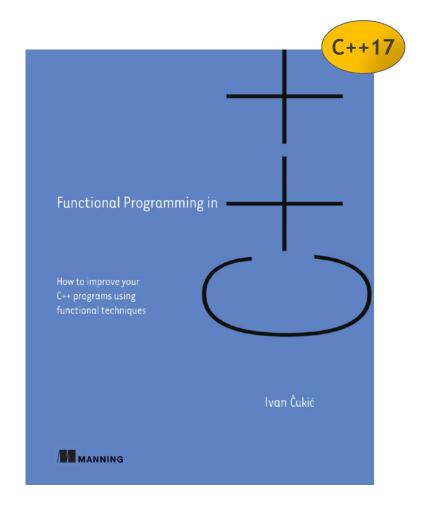
ISBN-10: 0321714121



Functional Programming in C++

- The best book on function programming in C++
- Very good introduction to functional programming concepts
- Very recommended

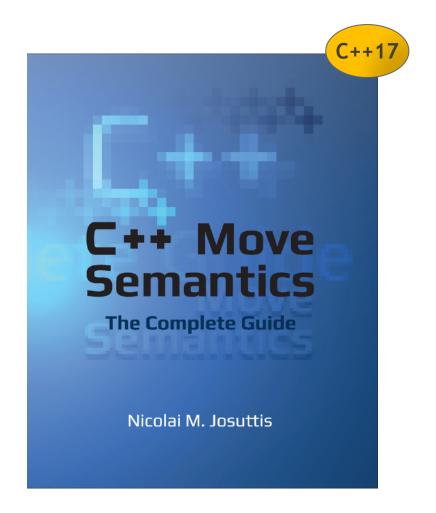
ISBN-10: 1617293814



C++ Move Semantics - The Complete Guide

- Everything about C++ move semantics
- From the basics to advanced problems and questions

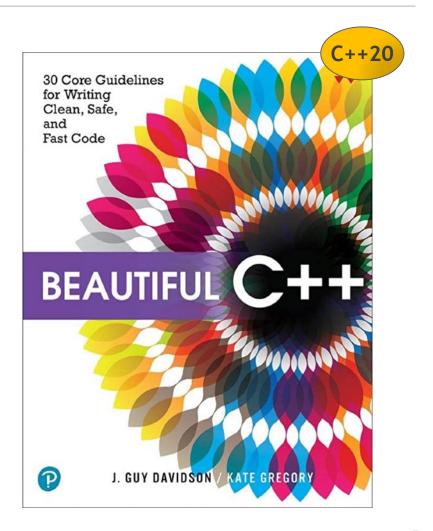
• ISBN-10: 3967309002



Beautiful C++

- Good explanation of 30 of the most relevant Core Guidelines
- Examples from real world experience
- Entertaining writing style

• ISBN-10: 0137647840

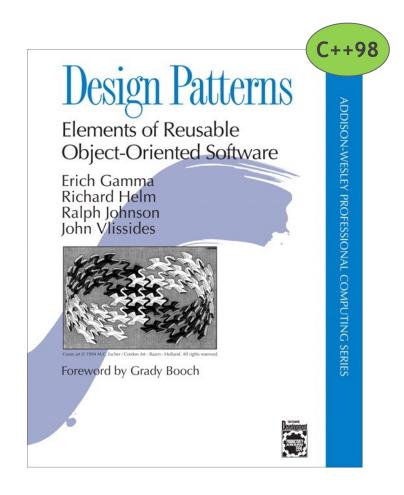


3. C++ Software Design

Design Patterns

- The "Gang of Four" (GoF) book
- The good old reference on classical design patterns
- Highly recommended

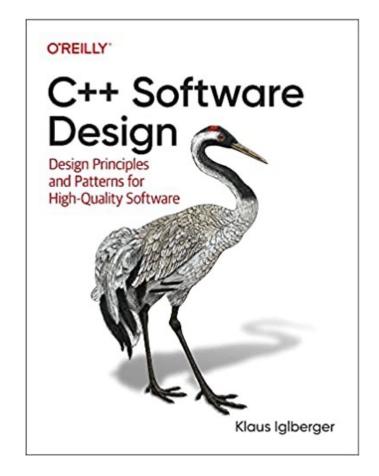
• ISBN-10: 0201633612



C++ Software Design

- The best book on software design with C++ (completely objectively, really!)
- Introduction to classic and modern C++ design patterns
- Covers implementation details
- Published in September 2022

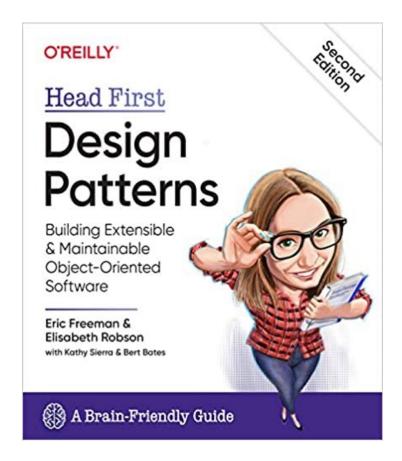




Head First Design Patterns (2nd Edition)

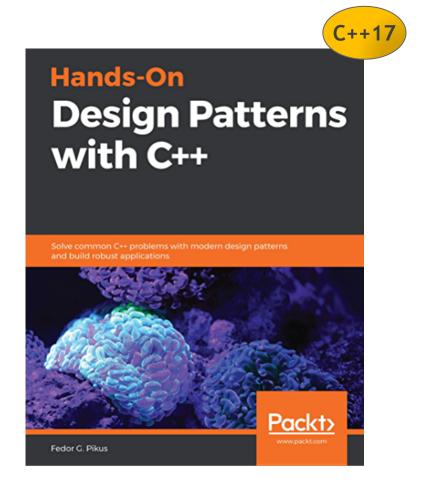
- One of the most instructive books on classic design patterns
- Recommended to get an impression on the OO implementation of patterns

• ISBN-10: 149207800X



Hands-On Design Patterns with C++

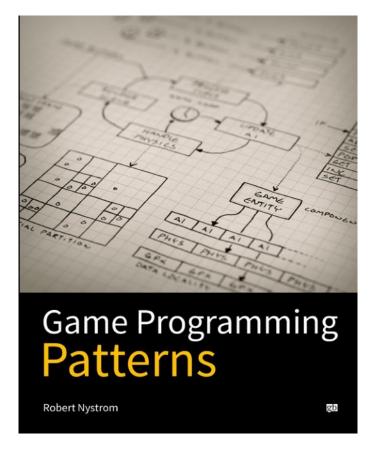
- Technically up-to-date introduction to many C++ design patterns
- A little implementation heavy
- ISBN-10: 1788832566
- ISBN-13: 978-1788832564



Game Programming Patterns

- Focus on code organization and decoupling
- Good selection of patterns
- Suited for all C++ developers, not just game developers

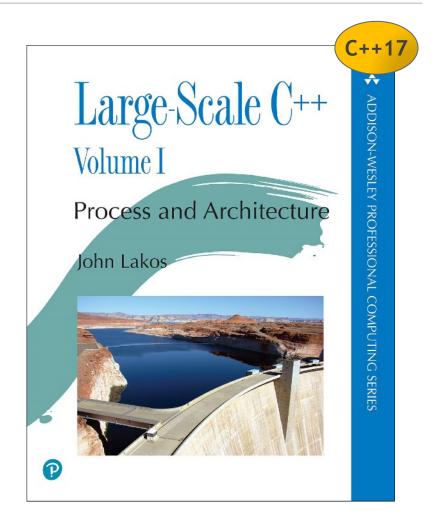
• ISBN-10: 0990582906



Large-Scale C++ (Volume I)

- Complete overview on software design and architecture
- Lots of important guidelines
- Very valuable for every C++ developer

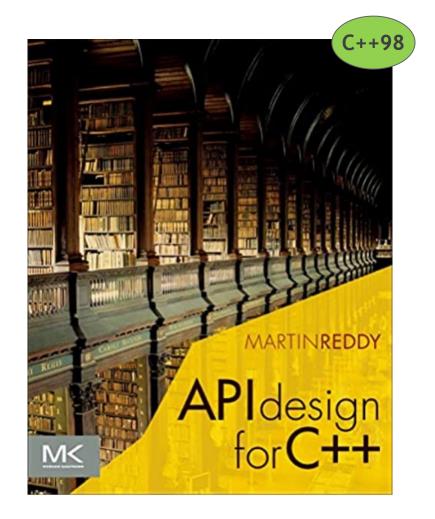
ISBN-10: 0201717069



API Design for C++

- Good overview of different aspects of API design
- From implementation details to design patterns

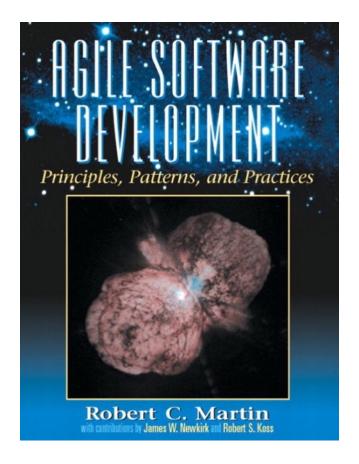
• ISBN-10: 0123850037



Agile Software Developement

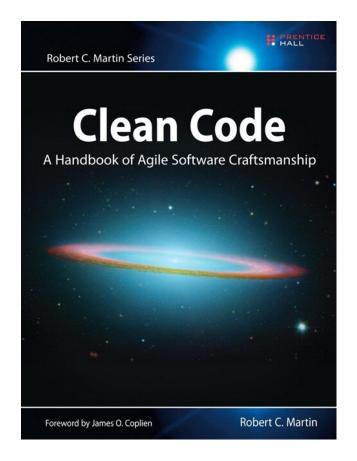
- One of the best book on the principles of agile software development
- Emphasis on design for change
- Very well written chapters on the basic principles of OO software design
- Highly recommended

ISBN-10: 1292025948



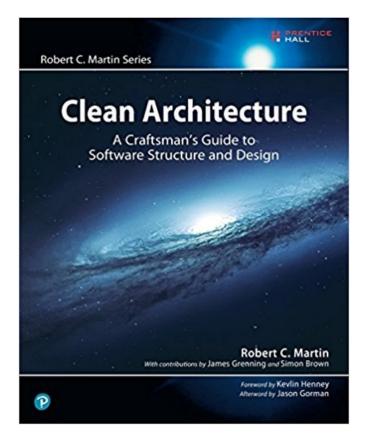
Clean Code

- Very well written book on all aspects of "Clean Code"
- Must-read for every professional C++ programmer
- ISBN-10: 9780132350884
- ISBN-13: 978-0132350884



Clean Architecture

- Very good overview of software design/architecture
- Very recommended for every software developer
- ISBN-10: 0134494164
- ISBN-13: 978-0134494166

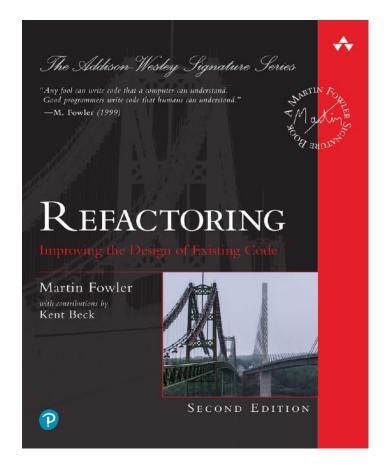


4. Refactoring and Testing

Refactoring

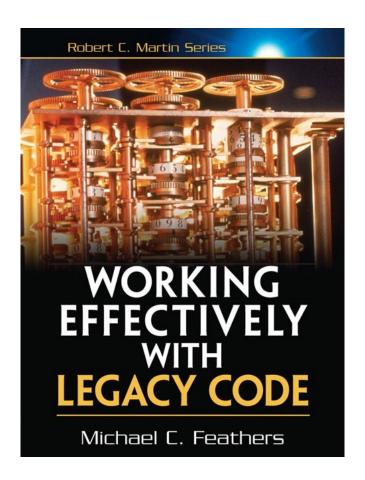
- Best available reference on refactoring techniques
- Well structured and written
- Recommended as reference for refactoring efforts

• ISBN-10: 0134757599



Working Effectively with Legacy Code

- Brilliant definition of legacy code
- Best available reference on how to work with legacy code
- Well suited structure
- Recommended for nearly all companies ;-)
- ISBN-10: 0131177052
- ISBN-13: 978-0131177055



Modern C++ Programming with Test-Driven Development

- Very thorough introduction to TDD
- Good examples
- Contains chapters on multithreaded tests
- Must-read for all companies ;-)

ISBN-10: 1937785483

ISBN-13: 978-1937785482





Modern C++ Programming with Test-Driven Development



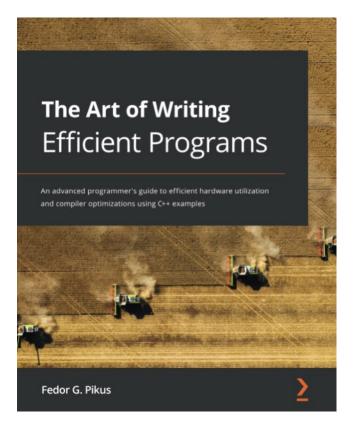
Jeff Langr
Foreword by Robert C. Martin
(Uncle Bob)
Edited by Michael Swaine

5. Performance Optimization

The Art of Writing Efficient Programs

- Lots of advise on all aspects of performance
- Practical advice on how to benchmark performance

• ISBN-10: 1800208111

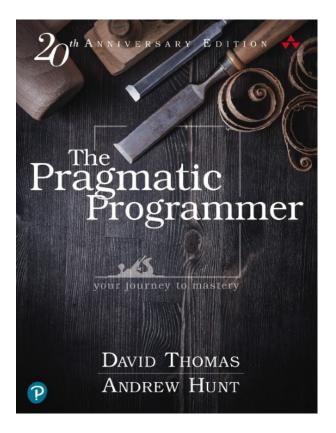


6. Professional Programming

The Pragmatic Programmer

- Expert advise on all aspects of every day software development
- Recommended read for every serious software programmer

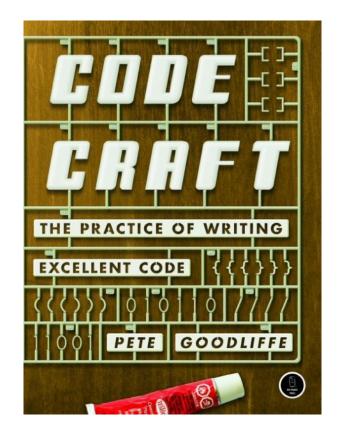
• ISBN-10: 0135957052



Code Craft: The Practice of Writing Excellent Code

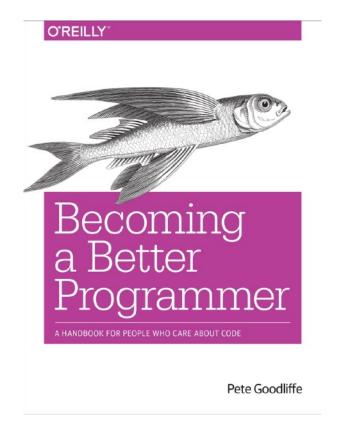
- Practical advise for the daily work in the "software factory"
- Recommended read for every software developer

• ISBN-10: 1593271190



Becoming a Better Programmer

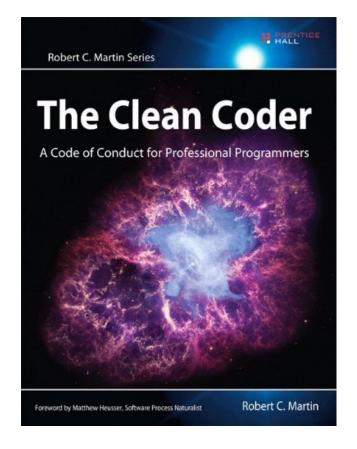
- A handbook for people who care about code
- Addresses all the essential aspects of software development
- ISBN-10: 9781491905531
- ISBN-13: 978-1491905531



The Clean Coder

- Successor of Clean Code
- Focus on the programmer himself
- Recommended for every aspiring professional

• ISBN-10: 0137081073



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Xing: xing.com/profile/Klaus_Iglberger/cv