C++ Training

# Literature

Klaus Iglberger

#### Content

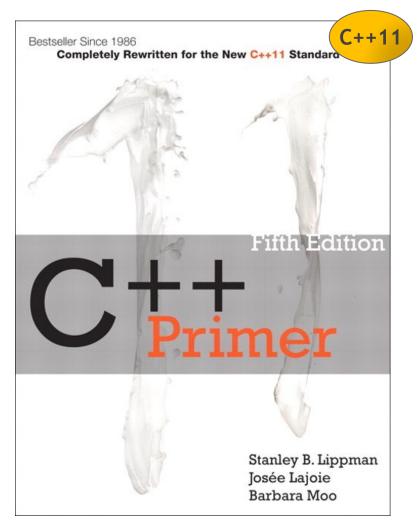
- 1. C++ Primers and References
- 2. Advanced C++ Programming
- 3. C++ Software Design
- 4. Refactoring and Testing
- 5. Performance Optimization
- 6. Professional Programming

#### 1. C++ Primers and References

#### C++ Primer

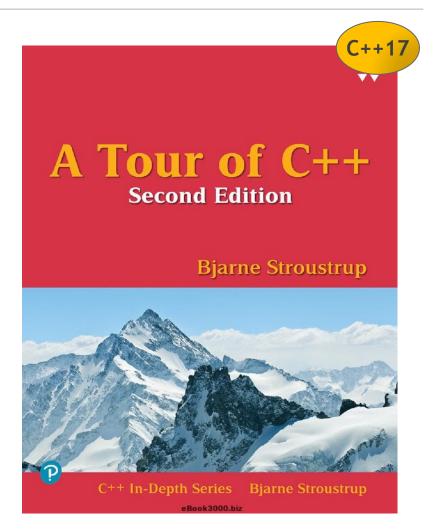
- Very well written introduction to C++
- Completely rewritten for C++11
- Proper introduction of C++ concepts and idioms

• ISBN-10: 9780321714114



#### A Tour of C++

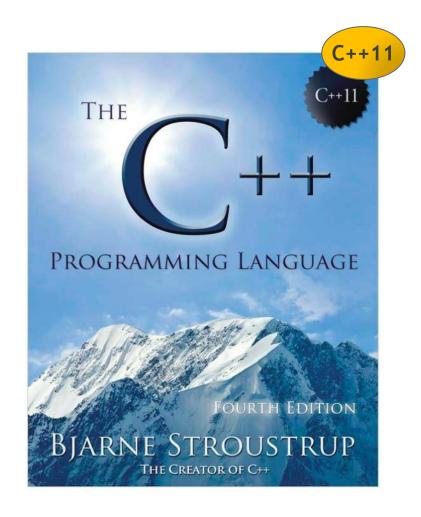
- Great overview of C++17
- Excellent opportunity to upgrade your C++ knowledge (only 256 pages)
- From the inventor of C++ himself
- ISBN-10: 0134997832
- ISBN-13: 978-0134997834



### 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

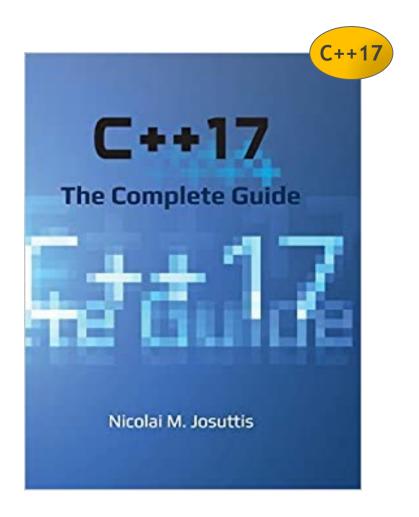
• ISBN-10: 0321958322



### C++17 - The Complete Guide

- A complete overview of C++17, introduced by an expert
- Contains all the C++17, including code examples
- Best introduction to C++17 polymorphic memory resources

• ISBN-10: 396730017X

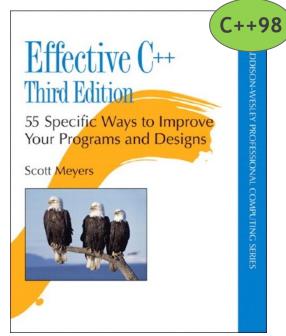


# 2. Advanced C++ Programming

#### Effective C++

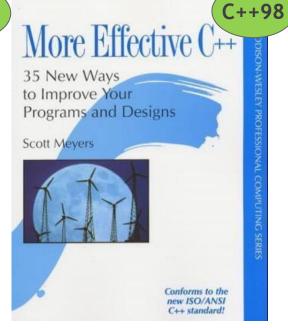
- The classic book on better software design with C++
- Many language details, good explanations and examples
- "Must-read" for every serious C++ programmer

Basis for a special set of Lint warnings



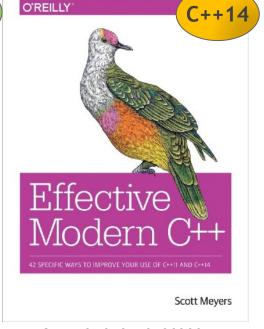
ISBN-10: 0321334876

• ISBN-13: 978-0321334879



• ISBN-10: 020163371X

ISBN-13: 978-0201633719



• ISBN-10: 9781491903995

#### Effective STL

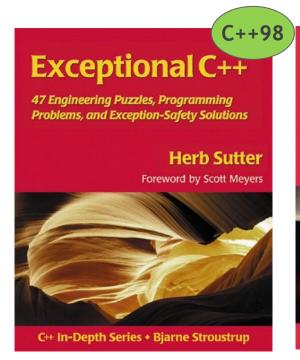
- 2<sup>nd</sup> successor of Effective C++
- Introduces proper use of the S(T)L
- Also a "must-read" for every C++ programmer
- ISBN-10: 0201749629
- ISBN-13: 978-0201749625



ADDISON-WESLEY PROFESSIONAL COMPUTING SERIES

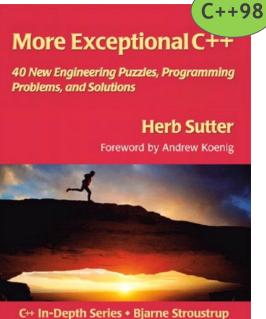
#### Exceptional C++

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

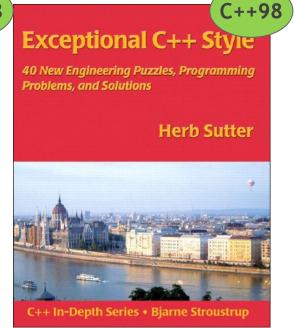


ISBN-10: 0201615622

ISBN-13: 978-0201615623 ISBN-13: 978-0201704341



ISBN-10: 020170434X

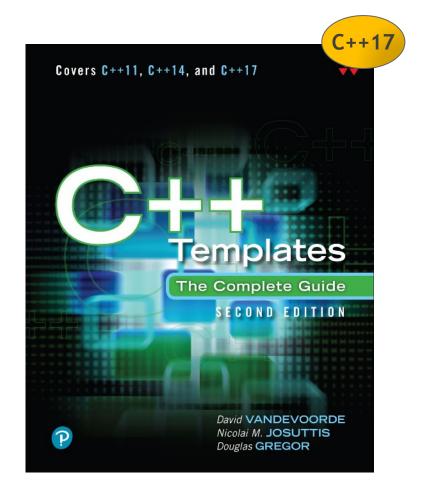


ISBN-10: 0201760428

### C++ Templates - The Complete Guide

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

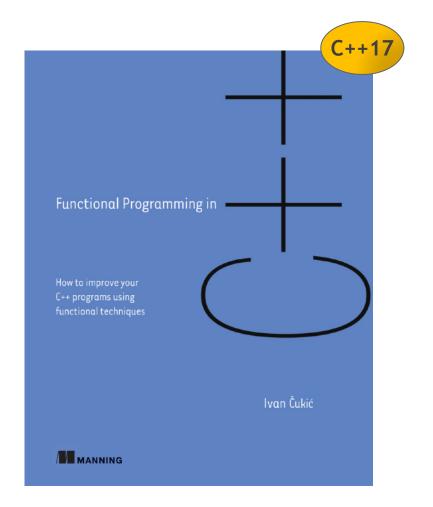
ISBN-10: 0321714121



## Functional Programming in C++

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

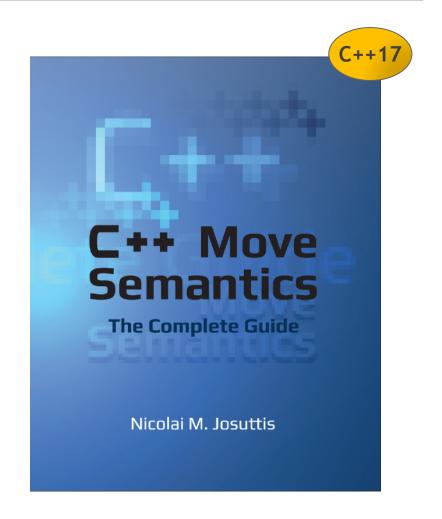
• ISBN-10: 1617293814



### C++ Move Semantics - The Complete Guide

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

• ISBN-10: 3967309002

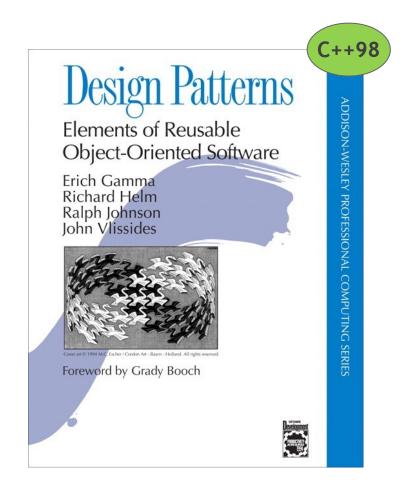


# 3. C++ Software Design

### Design Patterns

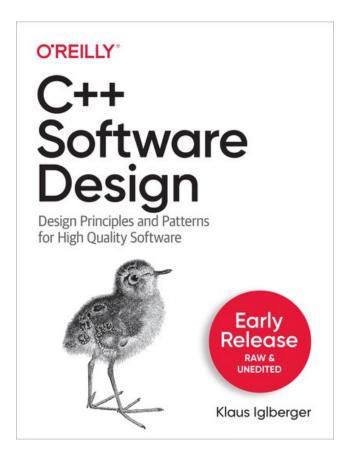
- The "Gang of Four" (GoF) book
- The good old reference on classical design patterns
- Highly recommended

• ISBN-10: 0201633612



### C++ Software Design

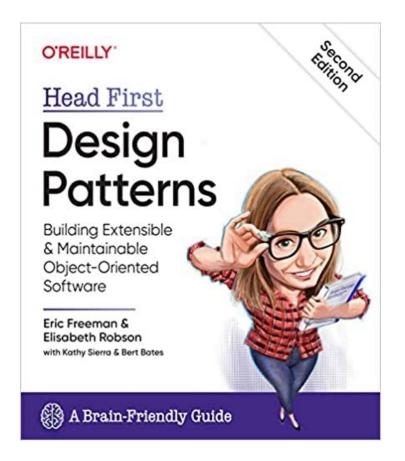
- The best book on software design with C++ (completely objectively, really!)
- Introduction to classic and modern C++ design patterns
- Covers implementation details
- Published in the second half of 2022
- https://learning.oreilly.com/ library/view/c-software-design/ 9781098113155/



### Head First Design Patterns (2nd Edition)

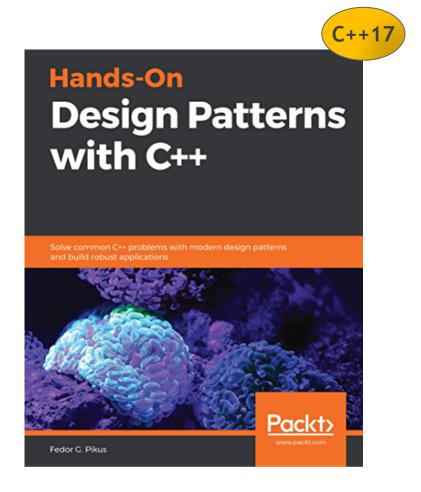
- One of the most instructive books on classic design patterns
- Recommended to get an impression on the OO implementation of patterns

• ISBN-10: 149207800X



### Hands-On Design Patterns with C++

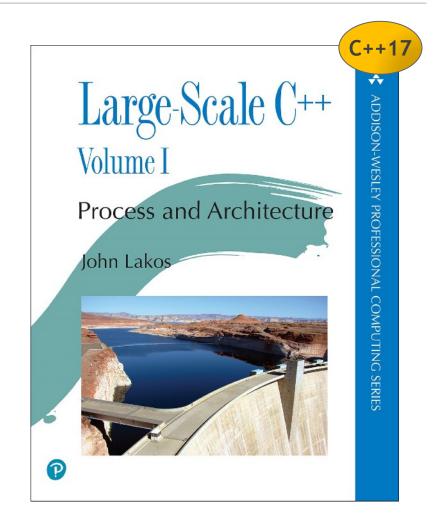
- Technically up-to-date introduction to many C++ design patterns
- A little implementation heavy
- ISBN-10: 1788832566
- ISBN-13: 978-1788832564



# Large-Scale C++ (Volume I)

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

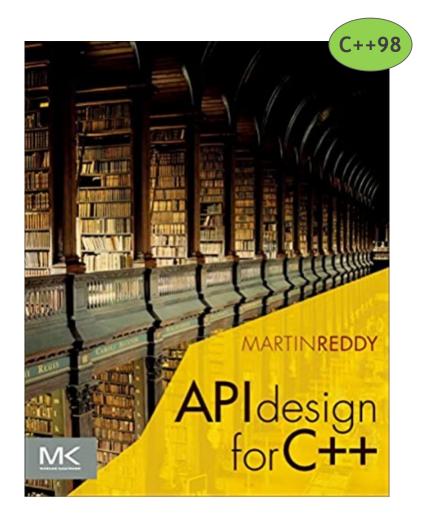
ISBN-10: 0201717069



# API Design for C++

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

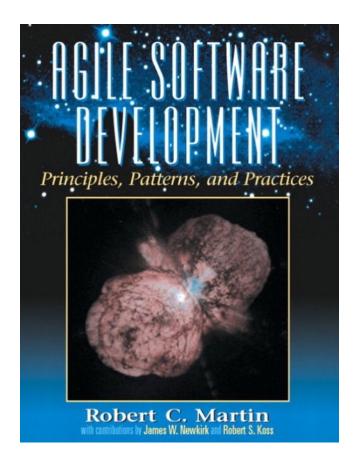
• ISBN-10: 0123850037



### Agile Software Developement

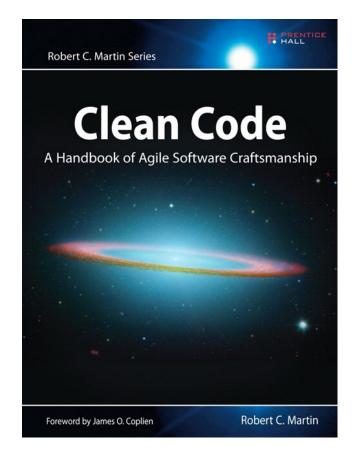
- One of the best book on the principles of agile software development
- Emphasis on design for change
- Very well written chapters on the basic principles of OO software design
- Highly recommended

ISBN-10: 1292025948



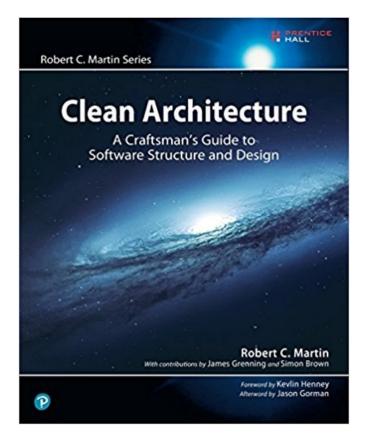
#### Clean Code

- 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

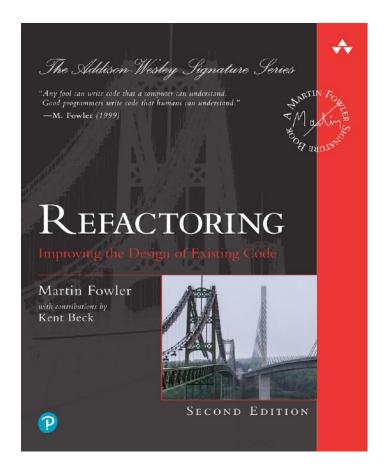


# 4. Refactoring and Testing

### Refactoring

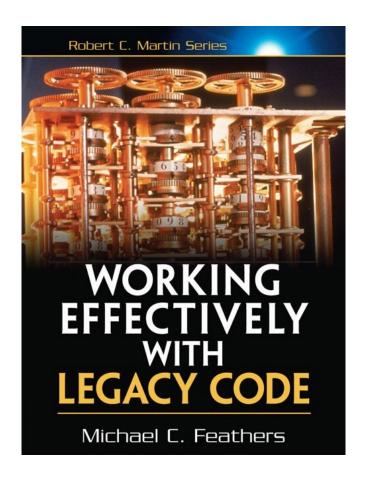
- Best available reference on refactoring techniques
- Well structured and written
- Recommended as reference for refactoring efforts

• 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

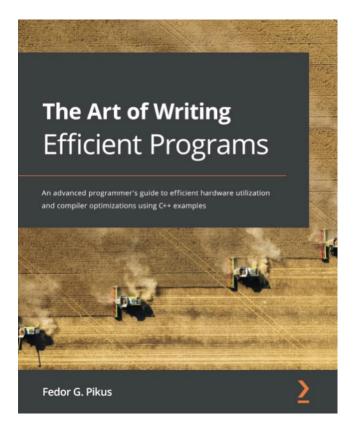


Jeff Langr
Foreword by Robert C. Martin
(Uncle Bob)
Edited by Michael Swaine

# 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
- ISBN-13: 978-1800208117

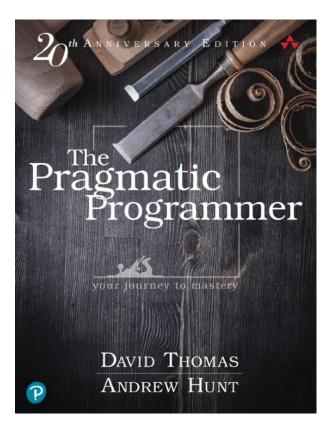


# 6. Professional Programming

### The Pragmatic Programmer

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

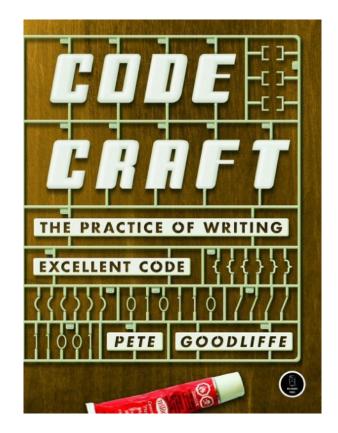
• ISBN-10: 0135957052



#### Code Craft: The Practice of Writing Excellent Code

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

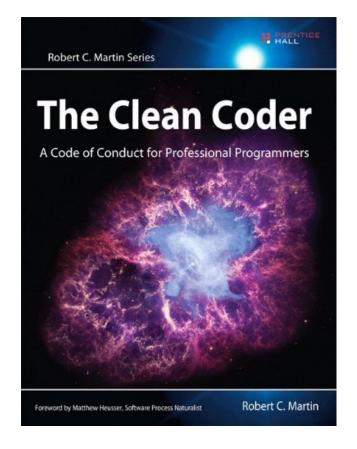
• ISBN-10: 1593271190



#### The Clean Coder

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

• ISBN-10: 0137081073



email: klaus.iglberger@gmx.de

LinkedIn: linkedin.com/in/klaus-iglberger-2133694/

Xing: xing.com/profile/Klaus\_Iglberger/cv