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ISBN	1-4302-6716-X
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (382 p.)
Collana	The expert's voice in programming
Disciplina	332.0285/5133
Soggetti	Programming languages (Electronic computers) Software engineering Programming Languages, Compilers, Interpreters Software Engineering/Programming and Operating Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Contents at a Glance; Introduction; Chapter 1: The Fixed Income Market; Fixed Income Overview; Why Using C++; Calculating Simple Interest Rates; Problem; Solution; How It Works; Complete Code; Sample Use; Compound Interest; Problem; Solution; How It Works; Complete Code; Sample Use; Modeling Cash Flows; Problem; Solution; Calculating Present Value; Calculating Present Value in C++; Using STL Containers; Complete Code; Running the Code; Modeling Bonds; Problem; Solution; Complete Code; Running the Code; Further Reference; Conclusion; Chapter 2: The Equities Market; Equities Market Concepts Sec2Market Participants; Moving Average Calculation; Problem; Solution; Complete Code; Running the Code; Calculating Volatility; Problem; Solution; Complete Code; Running the Code; Computing Instrument Correlation; Sec15; Problem; Solution; Complete Code; Running the Code; Calculating Fundamental Indicators; Problem; Solution; Complete Code; Running the Code; Conclusion; Chapter 3: C++ Programming Techniques in Finance; Calculating Interest Rates for Investment Instru ments; Solution; Complete Code; Running the Code; Creating Financial Statement Objects; Solution; Smart Pointers Using Auto PointersComplete Code; Transferring Ownership; Pitfalls of Auto Pointers; Determining Credit Ratings; Solution; Using Shared

Pointers; Complete Code; Using the auto Keyword; Collecting Transaction Data; Solution; Exception Handling; Complete Code; Implementing Vector Operations; Solution; Operator Overloading; Complete Code; Conclusion; Chapter 4: Common Libraries for Financial Applications; Handling Analyst Recommendations; Solution; More About STL Vectors and Maps; Complete Code; Performing Time-Series Transformations; Solution; Using STL Algorithms; Complete Code Running the Code Copying Transaction Files; Solution; Boost Libraries; Complete Code; Running the Code; Handling Dates; Solution; Complete Code; Running the Code; Conclusion; Chapter 5: Designing Numerical Classes; Representing Matrices in C++; Solution; Complete Code; Using Templates to Calculate Factorials; Solution; Complete Code; Running the Code; Representing Calmar Ratios at Compile Time; Solution; Representing Calmar Ratios; Complete Code; Running the Code; Generating Statistical Data; Solution; Probability Distributions; Complete Code; Running the Code; Conclusion Chapter 6: Plotting Financial Data Plotting with Gnuplot; Solution; Complete Code; Running the Code; Plotting Data from a GUI; Solution; Complete Code; Running the Code; Conclusion; Chapter 7: Linear Algebra; Using Basic Linear Algebra Operations; Solution; Complete Code; Using Matrix-Oriented Operations; Solution; Complete Code; Running the Application; Calculate the Determinant of a Matrix; Solution; Complete Code; Conclusion; Chapter 8: Interpolation; Linear Interpolation; Solution; Complete Code; Running the Code; Polynomial Interpolation; Solution; Complete Code; Running the Code Conclusion

Sommario/riassunto

Practical C++ Financial Programming is a hands-on book for programmers wanting to apply C++ to programming problems in the financial industry. The book explains those aspects of the language that are more frequently used in writing financial software, including the STL, templates, and various numerical libraries. The book also describes many of the important problems in financial engineering that are part of the day-to-day work of financial programmers in large investment banks and hedge funds. The author has extensive experience in the New York City financial industry that is now distilled into this handy guide. Focus is on providing working solutions for common programming problems. Examples are plentiful and provide value in the form of ready-to-use solutions that you can immediately apply in your day-to-day work. You'll learn to design efficient, numerical classes for use in finance, as well as to use those classes provided by Boost and other libraries. You'll see examples of matrix manipulations, curve fitting, histogram generation, numerical integration, and differential equation analysis, and you'll learn how all these techniques can be applied to some of the most common areas of financial software development. These areas include performance price forecasting, optimizing investment portfolios, and more. The book style is quick and to-the-point, delivering a refreshing view of what one needs to master in order to thrive as a C++ programmer in the financial industry. Covers aspects of C++ especially relevant to financial programming. Provides working solutions to commonly-encountered problems in finance. Delivers in a refreshing and easy style with a strong focus on the practical.
