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Titolo	Automated Trading with R [[electronic resource]] : Quantitative Research and Platform Development / / by Chris Conlan
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ISBN	1-4842-2178-8
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XXV, 205 p. 35 illus., 16 illus. in color.)
Disciplina	005.13
Soggetti	Programming languages (Electronic computers) Computer programming R (Computer program language) Programming Languages, Compilers, Interpreters Programming Techniques
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Part 1: Problem Scope -- Chapter 1: Fundamentals of Automated Trading -- Chapter 2: Networking Part I: Fetching Data -- Part 2: Building the Platform -- Chapter 3: Data Preparation -- Chapter 4: Indicators -- Chapter 5: Rule Sets -- Chapter 6: High-Performance Computing -- Chapter 7: Simulation and Backtesting -- Chapter 8: Optimization -- Chapter 9: Networking Part II -- Chapter 10: Organizing and Automating Scripts -- Part 3: Production Trading -- Chapter 11: Looking Forward -- Chapter 12: Appendix A: Source Code -- Chapter 13: Appendix B: Scoping in Multicore R -- .
Sommario/riassunto	All the tools you need are provided in this book to trade algorithmically with your existing brokerage, from data management, to strategy optimization, to order execution, using free and publicly available data. Connect to your brokerage's API, and the source code is plug-and-play. Automated Trading with R explains the broad topic of automated trading, starting with its mathematics and moving to its computation and execution. Readers will gain a unique insight into the mechanics and computational considerations taken in building a back-tester, strategy optimizer, and fully functional trading platform. The platform built in this book can serve as a complete replacement for commercially

available platforms used by retail traders and small funds. Software components are strictly decoupled and easily scalable, providing opportunity to substitute any data source, trading algorithm, or brokerage. This book will: Provide a flexible alternative to common strategy automation frameworks, like Tradestation, Metatrader, and CQG, to small funds and retail traders Offer an understanding of the internal mechanisms of an automated trading system Standardize discussion and notation of real-world strategy optimization problems What You'll Learn: To optimize strategies, generate real-time trading decisions, and minimize computation time while programming an automated strategy in R and using its package library How to best simulate strategy performance in its specific use case to derive accurate performance estimates Important optimization criteria for statistical validity in the context of a time series An understanding of critical real-world variables pertaining to portfolio management and performance assessment, including latency, drawdowns, varying trade size, portfolio growth, and penalization of unused capital.
