

A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading

By Ali N. Akansu, Mustafa U. Torun



A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun

This book bridges the fields of finance, mathematical finance and engineering, and is suitable for engineers and computer scientists who are looking to apply engineering principles to financial markets.

The book builds from the fundamentals, with the help of simple examples, clearly explaining the concepts to the level needed by an engineer, while showing their practical significance. Topics covered include an in depth examination of market microstructure and trading, a detailed explanation of High Frequency Trading and the 2010 Flash Crash, risk analysis and management, popular trading strategies and their characteristics, and High Performance DSP and Financial Computing. The book has many examples to explain financial concepts, and the presentation is enhanced with the visual representation of relevant market data. It provides relevant MATLAB codes for readers to further their study. Please visit the companion website on http://booksite.elsevier.com/9780128015612/

- Provides engineering perspective to financial problems
- In depth coverage of market microstructure
- Detailed explanation of High Frequency Trading and 2010 Flash Crash
- Explores risk analysis and management
- Covers high performance DSP & financial computing



A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading

By Ali N. Akansu, Mustafa U. Torun

A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun

This book bridges the fields of finance, mathematical finance and engineering, and is suitable for engineers and computer scientists who are looking to apply engineering principles to financial markets. The book builds from the fundamentals, with the help of simple examples, clearly explaining the concepts to the level needed by an engineer, while showing their practical significance. Topics covered include an in depth examination of market microstructure and trading, a detailed explanation of High Frequency Trading and the 2010 Flash Crash, risk analysis and management, popular trading strategies and their characteristics, and High Performance DSP and Financial Computing. The book has many examples to explain financial concepts, and the presentation is enhanced with the visual representation of relevant market data. It provides relevant MATLAB codes for readers to further their study. Please visit the companion website on http://booksite.elsevier.com/9780128015612/

- Provides engineering perspective to financial problems
- In depth coverage of market microstructure
- Detailed explanation of High Frequency Trading and 2010 Flash Crash
- Explores risk analysis and management
- Covers high performance DSP & financial computing

A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun Bibliography

Sales Rank: #1729159 in BooksPublished on: 2015-04-08

Released on: 2015-03-25Original language: English

• Number of items: 1

• Dimensions: 9.00" h x .36" w x 6.00" l, .55 pounds

• Binding: Paperback

• 156 pages

▶ Download A Primer for Financial Engineering: Financial Sign ...pdf

Read Online A Primer for Financial Engineering: Financial Si ...pdf

Download and Read Free Online A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun

Editorial Review

About the Author

Ali N. Akansu received the BS degree from the Technical University of Istanbul, Turkey, in 1980, the MS and Ph.D degrees from the Polytechnic University, Brooklyn, New York in 1983 and 1987, respectively, all in Electrical Engineering. He has been with the Electrical & Computer Engineering Department of the New Jersey Institute of Technology since 1987. He was an academic visitor at David Sarnoff Research Center, at IBM T.J. Watson Research Center, and at GEC-Marconi Electronic Systems Corp. He was a Visiting Professor at Courant Institute of Mathematical Sciences of the New York University performed research on Quantitative Finance. He serves as a consultant to the industry. His current research and professional interests include theory of signals and transforms, financial engineering & electronic trading, and high performance DSP (FPGA & GPU computing).

Mustafa U. Torun received his BS and MS degrees from the Dokuz Eylul University, Turkey, in 2005 and 2007 respectively, both in electrical and electronics engineering. He received his Ph.D degree from the New Jersey Institute of Technology, Newark, NJ, in 2013, in electrical engineering. He published several papers and served as a peer reviewer in many journals and conferences in a wide range of topics including multiresolution signal processing, statistical signal processing, pattern classification, neural networks, genetic algorithms; their applications in quantitative finance, electronic trading, high frequency trading, digital communications, digital imaging, biomedical engineering; and their implementations on general purpose graphics processing units (GP-GPU) and field programmable gate arrays (FPGA). His current interests include distributed systems, distributed algorithms, cloud computing, and massively parallel computing.

Users Review

From reader reviews:

Geneva Richardson:

The book A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading can give more knowledge and also the precise product information about everything you want. Why must we leave a very important thing like a book A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading? A number of you have a different opinion about book. But one aim which book can give many information for us. It is absolutely proper. Right now, try to closer along with your book. Knowledge or data that you take for that, you may give for each other; you could share all of these. Book A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading has simple shape but the truth is know: it has great and big function for you. You can search the enormous world by start and read a e-book. So it is very wonderful.

Frank Hudson:

A lot of people always spent their particular free time to vacation or even go to the outside with them friends and family or their friend. Do you realize? Many a lot of people spent these people free time just watching TV, or maybe playing video games all day long. If you would like try to find a new activity this is look different you can read any book. It is really fun for you personally. If you enjoy the book you read you can

spent all day every day to reading a e-book. The book A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading it doesn't matter what good to read. There are a lot of those who recommended this book. These were enjoying reading this book. In case you did not have enough space to deliver this book you can buy the actual e-book. You can m0ore easily to read this book from the smart phone. The price is not to fund but this book possesses high quality.

Jean Cunningham:

Do you have something that you like such as book? The publication lovers usually prefer to choose book like comic, small story and the biggest an example may be novel. Now, why not hoping A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading that give your entertainment preference will be satisfied by means of reading this book. Reading habit all over the world can be said as the means for people to know world far better then how they react to the world. It can't be stated constantly that reading behavior only for the geeky man but for all of you who wants to possibly be success person. So, for every you who want to start looking at as your good habit, you can pick A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading become your current starter.

Brandon Gentry:

You will get this A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading by visit the bookstore or Mall. Only viewing or reviewing it could to be your solve problem if you get difficulties for ones knowledge. Kinds of this publication are various. Not only simply by written or printed but can you enjoy this book by simply e-book. In the modern era just like now, you just looking by your local mobile phone and searching what your problem. Right now, choose your own personal ways to get more information about your reserve. It is most important to arrange you to ultimately make your knowledge are still revise. Let's try to choose proper ways for you.

Download and Read Online A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun #8INUSGA4H3K

Read A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun for online ebook

A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun books to read online.

Online A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun ebook PDF download

A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun Doc

A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun Mobipocket

A Primer for Financial Engineering: Financial Signal Processing and Electronic Trading By Ali N. Akansu, Mustafa U. Torun EPub