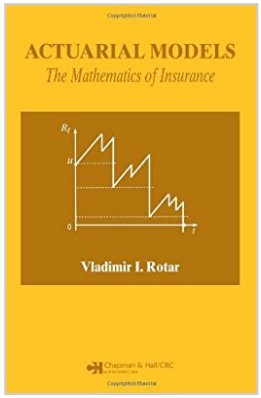

Actuarial Models: The Mathematics of Insurance

By Vladimir I. Rotar

Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar

A First Course in Probability with an Emphasis on Stochastic Modeling
Probability and Stochastic Modeling not only covers all the topics found in a traditional introductory probability course, but also emphasizes stochastic modeling, including Markov chains, birth-death processes, and reliability models. Unlike most undergraduate-level probability texts, the book also focuses on increasingly important areas, such as martingales, classification of dependency structures, and risk evaluation. Numerous examples, exercises, and models using real-world data demonstrate the practical possibilities and restrictions of different approaches and help students grasp general concepts and theoretical results.

The text is suitable for majors in mathematics and statistics as well as majors in computer science, economics, finance, and physics. The author offers two explicit options to teaching the material, which is reflected in "routes" designated by special "roadside" markers. The first route contains basic, self-contained material for a one-semester course. The second provides a more complete exposition for a two-semester course or self-study.

Actuarial Models: The Mathematics of Insurance

By Vladimir I. Rotar

Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar

A First Course in Probability with an Emphasis on Stochastic Modeling
Probability and Stochastic Modeling not only covers all the topics found in a traditional introductory probability course, but also emphasizes stochastic modeling, including Markov chains, birth-death processes, and reliability models. Unlike most undergraduate-level probability texts, the book also focuses on increasingly important areas, such as martingales, classification of dependency structures, and risk evaluation. Numerous examples, exercises, and models using real-world data demonstrate the practical possibilities and restrictions of different approaches and help students grasp general concepts and theoretical results.

The text is suitable for majors in mathematics and statistics as well as majors in computer science, economics, finance, and physics. The author offers two explicit options to teaching the material, which is reflected in "routes" designated by special "roadside" markers. The first route contains basic, self-contained material for a one-semester course. The second provides a more complete exposition for a two-semester course or self-study.

Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar Bibliography

- Sales Rank: #2478279 in Books
- Published on: 2006-09-20
- Original language: English
- Number of items: 1
- Dimensions: 1.56" h x 6.96" w x 10.42" l, 3.00 pounds
- Binding: Hardcover
- 656 pages

Editorial Review

Review

"This book covers practically all essential topics from modern probability and stochastic processes, which in one or another way are included in various university programs. So, is there something making this book different or better than many others available in the market? The answer is yes! The author presents the material systematically and rigorously. Of primary importance, however, is the emphasis on the modeling aspects. The large number of well-chosen and carefully described practical cases is a tremendous advantage of the book. … strongly recommended as a basic source for a variety of courses."
?G. Schröder, *Zentralblatt MATH* 1268

"The author's mode of presentation is well chosen. New concepts are introduced with illuminating discussion and illustrations. … The book is physically nicely presented. … this text has something new to offer, mainly for business-oriented students, and I recommend that instructors give it serious consideration when choosing a text for their courses.
?Anthony G. Pakes, *Mathematical Reviews*, September 2013

"This is a superbly written text on probability and stochastic processes for students who have had two semesters of calculus and an introductory course in linear algebra. This includes upper division students in science and engineering including statistics and mathematics, as well as students in fields such as economics and finance. In addition, it will be a wonderful book for self study for many others. Important and well-chosen examples illustrate the theory throughout, and a large body of exercises supplements the text. It gives a lucid presentation of basic probability theory, including Markov chains and martingales. A special feature of this book is a marvelous exposition of many interesting aspects of financial mathematics that are generally considered rather intricate and inaccessible at this level. This book carries the imprint of a distinguished mathematician and teacher with expertise in probability theory and many of its special applications to mathematical economics and finance. It is an outstanding addition to the field requiring only a modest background in mathematics."
?Rabi Bhattacharya, Department of Mathematics, University of Arizona, Tucson, USA

"Written in a lively and stimulating manner, the book makes a very good impression. The author, having extensive teaching experience and an undoubted literary talent, has managed to create an original introduction to modern probability theory. The successful combination of a variety of examples, exercises and applications with deep and nontrivial ideas makes the book interesting not only for beginning students, but also for professionals working with probabilistic problems. I believe that the book can serve as an ideal textbook for anyone interested in probability theory and its applications. The book will take a worthy place in the literature on probabilistic issues."
?Youri Davydov, Laboratoire Paul Painlevé, Université des Sciences et Technologies de Lille, France

"The author has produced a comprehensive introduction to probability theory and stochastic processes, including martingales and Brownian motion. The text is suitable for students with a standard background in calculus and linear algebra. The approach is rigorous without being pedantic, and the text is liberally sprinkled with examples. Throughout, there is a welcome emphasis on stochastic modeling. Of note is the fairly early introduction and use of conditional expectations.
The main text is complemented by a large collection of exercises with a wide range of difficulty. The book is

in fact two-in-one, as a series of ‘roadside markers’ guides the reader through two possible courses of study, one consisting of material suitable for a one-semester course, and the other a more in-depth journey suitable for a two-semester course. This book is a welcome and attractive addition to the list of textbooks available for an upper division probability course and would even be suitable for a graduate-level introduction to non-measure-theoretic probability and stochastic processes."
?Patrick J. Fitzsimmons, Department of Mathematics, University of California-San Diego, La Jolla, USA

About the Author

Vladimir I. Rotar is a professor in the Department of Mathematics and Statistics at San Diego State University. Dr. Rotar has authored four books and more than 100 scientific papers on probability theory and its applications in leading mathematical journals.

Users Review

From reader reviews:

Terry Palladino:

Book is usually written, printed, or outlined for everything. You can recognize everything you want by a book. Book has a different type. As you may know that book is important thing to bring us around the world. Adjacent to that you can your reading ability was fluently. A book Actuarial Models: The Mathematics of Insurance will make you to become smarter. You can feel more confidence if you can know about almost everything. But some of you think this open or reading a new book make you bored. It isn't make you fun. Why they could be thought like that? Have you in search of best book or acceptable book with you?

Oscar Jackson:

This Actuarial Models: The Mathematics of Insurance is great e-book for you because the content which is full of information for you who else always deal with world and have to make decision every minute. This specific book reveal it info accurately using great coordinate word or we can point out no rambling sentences within it. So if you are read the item hurriedly you can have whole information in it. Doesn't mean it only provides straight forward sentences but tricky core information with lovely delivering sentences. Having Actuarial Models: The Mathematics of Insurance in your hand like keeping the world in your arm, data in it is not ridiculous one. We can say that no guide that offer you world with ten or fifteen tiny right but this e-book already do that. So , it is good reading book. Hey there Mr. and Mrs. active do you still doubt that will?

Herman Jenkins:

Many people spending their time period by playing outside with friends, fun activity using family or just watching TV 24 hours a day. You can have new activity to enjoy your whole day by reading a book. Ugh, do you think reading a book can really hard because you have to take the book everywhere? It okay you can have the e-book, delivering everywhere you want in your Mobile phone. Like Actuarial Models: The Mathematics of Insurance which is getting the e-book version. So , why not try out this book? Let's see.

Helen Butts:

A lot of e-book has printed but it is unique. You can get it by web on social media. You can choose the most effective book for you, science, witty, novel, or whatever by means of searching from it. It is named of book Actuarial Models: The Mathematics of Insurance. You'll be able to your knowledge by it. Without leaving behind the printed book, it could possibly add your knowledge and make a person happier to read. It is most crucial that, you must aware about guide. It can bring you from one place to other place.

Read Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar for online ebook

Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar 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 Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar books to read online.

Online Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar ebook PDF download

Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar Doc

Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar Mobipocket

Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar EPub

F5KYB8HO6ZV: Actuarial Models: The Mathematics of Insurance By Vladimir I. Rotar