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Elementary Probability for Applications

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Cornell University, New York

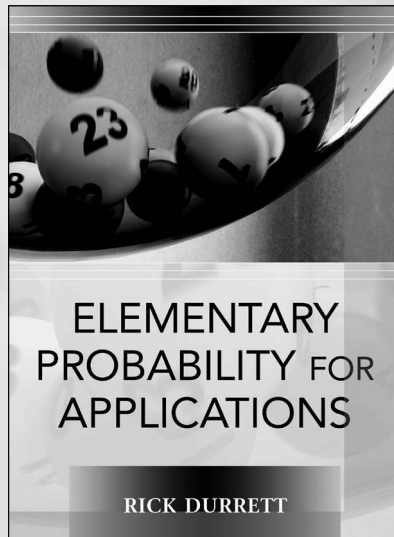
Hardback | 978-0-521-86756-6 | 55 b/w illus. | 80 tables | 355 exercises | 254 pages

Features

- ▶ **Wide variety of examples:** The book contains more than 200 examples. In addition to the classic examples (e.g. Monty Hall, medical testing) there are plenty of novel examples, such as Benford's law, the TV show "Deal or No Deal," alliteration in Shakespeare, Wayne Gretsky's scoring record, the trial of O.J. Simpson, how to play blackjack, the hot hand in basketball, and option pricing.
- ▶ **Diverse Subject Matter:** Coverage of Markov chains and applications in biology and finance allows for widespread applications for students and continuous distributions presented as an optional topic allows the instructor to minimize the reliance on calculus.
- ▶ **Thoroughly course-tested and extensively reviewed:** Based on the author's years of teaching experience, the text is ideally suited for the classroom.

"The book has a nice interplay between probability modeling and scientific applications, whether from biology, sports, or discussions of China's one-child policy. Many of the examples are thought-provoking...As an instructor, I enjoy digging into these examples in class. And the large selection of interesting problems builds basic skills and deepens or extends the main ideas."

– Michael Phelan, University of California at Irvine



Contents

1. Basic concepts
2. Combinatorial probability
3. Conditional probability
4. Markov chains
5. Continuous distributions
6. Limit theorems
7. Option pricing

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