## Winner of 2012 PROSE Award for Mathematics

"A great book, one that I will certainly add to my personal library."
—*Paul J. Nahin, Professor Emeritus of Electrical Engineering, University of New Hampshire*

*Classic Problems of Probability* presents a lively account of the most intriguing aspects of statistics. The book features a large collection of more than thirty classic probability problems which have been carefully selected for their interesting history, the way they have shaped the field, and their counterintuitive nature.

From Cardano's 1564 Games of Chance to Jacob Bernoulli's 1713 Golden Theorem to Parrondo's 1996 Perplexing Paradox, the book clearly outlines the puzzles and problems of probability, interweaving the discussion with rich historical detail and the story of how the mathematicians involved arrived at their solutions. Each problem is given an in-depth treatment, including detailed and rigorous mathematical proofs as needed. Some of the fascinating topics discussed by the author include:

- Buffon's Needle problem and its ingenious treatment by Joseph Barbier, culminating into a discussion of invariance
- Various paradoxes raised by Joseph Bertrand
- Classic problems in decision theory, including Pascal's Wager, Kraitchik's Neckties, and Newcomb's problem
- The Bayesian paradigm and various philosophies of probability
- Coverage of both elementary and more complex problems, including the Chevalier de Méré problems, Fisher and the lady tasting tea, the birthday problem and its various extensions, and the Borel-Kolmogorov paradox

*Classic Problems of Probability* is an eye-opening, one-of-a-kind reference for researchers and professionals interested in the history of probability and the varied problem-solving strategies employed throughout the ages. The book also serves as an insightful supplement for courses on mathematical probability and introductory probability and statistics at the undergraduate level.

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