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Autore	Dworsky Lawrence N. <1943->
Titolo	Probably not : future prediction using probability and statistical inference // Lawrence N. Dworsky
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , 2019
ISBN	1-119-51814-8 1-119-51813-X
Edizione	[Second edition.]
Descrizione fisica	1 online resource (350 pages)
Disciplina	519.2/87
Soggetti	Prediction theory Probabilities Mathematical statistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction -- An introduction to probability -- Probability distribution functions and some math basics -- Building a bell -- Random walks -- Life insurance -- The binomial theorem -- Pseudorandom numbers and Monte-Carlo simulations -- Some gambling games in detail -- Scheduling and waiting -- Combined and conditional probabilities -- Bayesian statistics -- Estimation problems -- Paradoxes -- Benford's law -- Networks, infectious diseases and chain letters -- Introduction to frequentist statistical inference -- Statistical mechanics and thermodynamics -- Chaos and quanta -- Appendix.
Sommario/riassunto	A revised edition that explores random numbers, probability, and statistical inference at an introductory mathematical level Written in an engaging and entertaining manner, the revised and updated second edition of Probably Not continues to offer an informative guide to probability and prediction. The expanded second edition contains problem and solution sets. In addition, the book's illustrative examples reveal how we are living in a statistical world, what we can expect, what we really know based upon the information at hand and explains when we only think we know something. The author introduces the principles of probability and explains probability distribution functions. The book

covers combined and conditional probabilities and contains a new section on Bayes Theorem and Bayesian Statistics, which features some simple examples including the Prosecutor's Paradox, and Bayesian vs. Frequentist thinking about statistics. New to this edition is a chapter on Benford's Law that explores measuring the compliance and financial fraud detection using Benford's Law. This book: Contains relevant mathematics and examples that demonstrate how to use the concepts presented Features a new chapter on Benford's Law that explains why we find Benford's law upheld in so many, but not all, natural situations Presents updated Life insurance tables Contains updates on the Gantt Chart example that further develops the discussion of random events Offers a companion site featuring solutions to the problem sets within the book Written for mathematics and statistics students and professionals, the updated edition of *Probably Not: Future Prediction Using Probability and Statistical Inference, Second Edition* combines the mathematics of probability with real-world examples. LAWRENCE N. DWORSKY, PhD, is a retired Vice President of the Technical Staff and Director of Motorola's Components Research Laboratory in Schaumburg, Illinois, USA. He is the author of *Introduction to Numerical Electrostatics Using MATLAB* from Wiley.
