1. Record Nr. UNISA996217426303316

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Titolo	Probability and statistics for computer science [[electronic resource] /] / James L. Johnson
Pubbl/distr/stampa	Hoboken, NJ, : Wiley Interscience, c2008
ISBN	9786613274021 1-283-27402-7 1-118-16596-9 1-118-16583-7
Descrizione fisica	1 online resource (764 p.)
Disciplina	519.2024004
Soggetti	Computer science - Mathematics Probabilities Mathematical statistics - Data processing Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 733-738) and index.
Nota di contenuto	Probability and Statistics for Computer Science; Contents; Preface; 1 Combinatorics and Probability; 1.1 Combinatorics; 1.1.1 Sampling without replacement; 1.1.2 Sampling with replacement; 1.2 Summations; 1.3 Probability spaces and random variables; 1.4 Conditional probability; 1.5 Joint distributions; 1.6 Summary; 2 Discrete Distributions; 2.1 The Bernoulli and binomial distributions; 2.2 Power series; 2.3 Geometric and negative binomial forms; 2.4 The Poisson distribution; 2.5 The hypergeometric distribution; 2.6 Summary; 3 Simulation; 3.1 Random number generation 3.2 Inverse transforms and rejection filters3.3 Client-server systems; 3.4 Markov chains; 3.4.1 Irreducible aperiodic Markov chains; 3.4.2 Convergence properties; 4 Discrete Decision Theory; 4.1 Decision methods without samples; 4.2 Statistics and their properties; 4.3 Sufficient statistics; 4.4 Hypothesis testing; 4.4.1 Simple hypothesis versus simple alternative; 4.4.2 Composite hypotheses; 4.5 Summary; 5 Real Line-Probability; 5.1 One-dimensional real distributions; 5.2 Joint random variables; 5.3 Differentiable distributions; 5.4 Summary; 6

Continuous Distributions

6.1 The normal distribution6.1.1 The univariate and bivariate normal distributions; 6.1.2 The multivariate normal distribution; 6.2 Limit theorems; 6.2.1 Convergence concepts; 6.2.2 An inversion formula; 6.3 Gamma and beta distributions; 6.4 The 2 and related distributions; 6.5 Computer simulations; 6.6 Summary; 7 Parameter Estimation; 7.1 Bias, consistency, and efficiency; 7.2 Normal inference; 7.3 Sums of squares; 7.4 Analysis of variance; 7.5 Linear regression; 7.6 Summary; A Analytical Tools; A.1 Sets and functions; A.2 Limits; A.3 Structure of the real numbers

A.4 Riemann-Stieltjes integralsA.5 Permutations and determinants; B Statistical Tables; Bibliography; Index

Sommario/riassunto

Comprehensive and thorough development of both probability and statistics for serious computer scientists; goal-oriented: ""to present the mathematical analysis underlying probability results""Special emphases on simulation and discrete decision theoryMathematically-rich, but self-contained text, at a gentle paceReview of calculus and linear algebra in an appendixMathematical interludes (in each chapter) which examine mathematical techniques in the context of probabilistic or statistical importanceNumerous section exercises, summaries, historical notes, and Further Readings