Probability and Statistics with Reliability, Queuing, and Computer Science Applications. 2nd Edition

Description: Provides a comprehensive introduction to probability, stochastic processes and statistics

This book covers fundamental concepts in probability and statistics, and relates these concepts to computer science and engineering. The author begins with a five–chapter–long coverage of probability theory designed for a one–semester introductory course on applied probability. Real–world examples and problems are used to help readers understand applied probability concepts. Chapters six though nine in turn are designed to be the core of an introductory course on stochastic processes and their applications. The remaining two chapters discuss statistical interference and regression that can form a core of a course on statistics.

- Theory and applications of Markov chains to model reliability, availability, performance and performability of computer systems and networks are extensively discussed
- Numerical solution techniques for Markov chains and stochastic Petri nets as a means of automatically generating large Markov chains are discussed
- Applications include, fault tolerant and dependable computing, real–time systems, cellular wireless systems, and software reliability
- Includes over 200 in–text examples as well as self–study exercises for each section
- Provides access to a book companion website with an instructor manual and power point slides

Probability and Statistics with Reliability, Queuing and Computer Science Applications, 2nd Edition is written for senior undergraduate and graduate students interested in electrical and computer engineering, reliability engineering, and applied mathematics. This book will also be of interest to practicing engineers and researchers in these areas.

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