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""4.1.3 Computation of Irregular Area using Monte Carlo Simulation ""

Sommario/riassunto

About the Book: Although a number of books and research papers have appeared in the literature, a need is felt to have a systematic study of the subject which inculcates into designing and preparation of this book, updated with engineering applications. The basic techniques of Modeling and Simulation are now being taught in undergraduate engineering courses and its applications in various engineering subjects require detailed studies. An attempt has been made to make this treatise useful to engineers as well as scientists, especially defence scientists. Most of the chapters in the book are based on the papers published by the author in various technical journals. Various mathematical and computer models were incorporated to have an efficient understanding of the basics system development. In order to make the analysis easier to understand, basic mathematical techniques such as probability, discrete & continuous system, queuing system which will be essential for the understanding of the subject have also been discussed. Rather than these mathematical topics, other topics dealing with aircraft and warheads, in which various components such as survivability analysis, vulnerability and cost effectiveness are included. System dynamics and inventory control model give the basic perspective of growth and delivery rate system. Contents: What is a System Modeling and Simulation Probability as Used in Simulation An Aircraft Survivability Analysis Discrete Simulation Continuous System Simulation Simulation Model for Aircraft Vulnerability Simulation of Queuing Systems System Dynamics Inventory Control Models Cost-Effectiveness Models