QUEUEING SYSTEMS, VOLUME 2 : COMPUTER APPLICATIONS

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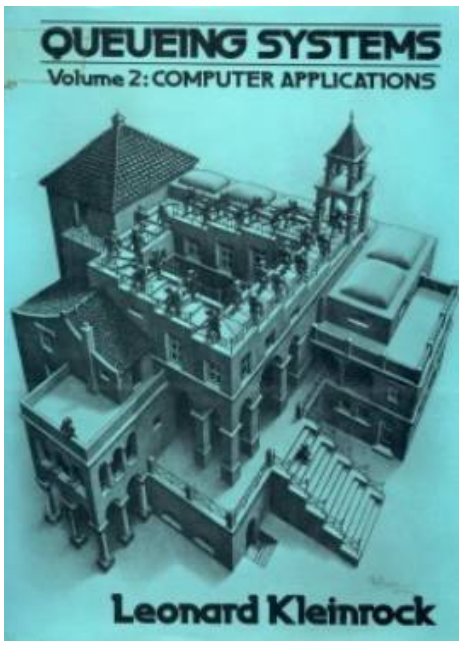

SUMMARY

This book presents and develops methods from queuing theory in sufficient depth so that students and professionals may apply these methods to many modern engineering problems, as well as conduct creative research in the field.

It provides a long-needed alternative both to highly mathematical texts and to those which are simplistic or limited in approach. Written in mathematical language, it avoids the "theorem-proof" technique: instead, it guides the reader through a step-by-step, intuitively motivated yet precise development leading to a natural discovery of results. Queuing Systems, Volume 1 covers material ranging from a refresher of transform and probability theory through the treatment of advanced queuing systems. It is divided into four sections: 1) preliminaries; 2) elementary queuing theory; 3) intermediate queuing theory and 4) advanced material!

Important features of Queuing Systems, Volume 1: Theory include:

- techniques of duality, collective marks
- queuing networks
- complete appendix on z-transforms and Laplace transforms
- an entire appendix on probability theory, providing the notation and main results

needed throughout the text

- definition and use of a new and convenient graphical notation for describing the arrival and departure of customers to a queuing system
- a Venn diagram classification of many common stochastic processes

1975 (0 471-49110-1) 417 pp.

FUNDAMENTALS OF QUEUEING THEORY . Second Edition

Donald Gross and Carl M. Harris

This graduated, meticulous look at queuing fundamentals developed from the authors lecture notes presents all aspects of the methodology - including Simple Markovian birth-death queuing models; advanced Markovian models; networks, series, and cyclic queues; models with general arrival or service patterns; bounds, approximations, and numerical techniques; and simulation - in a style suitable to courses of study of widely varying depth and duration. This Second Edition features new expansions and abridgements which enhance pedagogical use: new material on numerical solution techniques for both steady-state and transient solutions; changes in simulation language and new results in statistical analysis; and more. Complete with a solutions manual, here is a comprehensive, rigorous introduction to the basics of the discipline.

1985 (0471-83143-3) 220 pp.

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