Record Nr. UNINA9910961326403321 Autore Gelenbe Erol <1945-> Titolo Analysis and synthesis of computer systems / / E. Gelenbe and Isi Mitrani London, : Imperial College Press, c2010 Pubbl/distr/stampa **ISBN** 9786612759925 9781282759923 1282759922 9781848163966 1848163967 Edizione [2nd ed.] Descrizione fisica 1 online resource (324 p.) Collana Advances in computer science and engineering: Texts;; v. 4 Altri autori (Persone) Mitranil 004.24 Disciplina Soggetti Electronic digital computers - Evaluation Queuing theory 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 and index. Nota di contenuto Preface to the Second Edition; Contents; 1. Basic Tools of Probabilistic Modelling: 2. The Queue with Server of Walking Type and Its Applications to Computer System Modelling; 3. Queuing Network Models; 4. Queuing Networks with Multiple Classes of Positive and Negative Customers and Product Form Solution: 5. Markov-Modulated Queues; 6. Diffusion Approximation Methods for General Queuing Networks; 7. Approximate Decomposition and Iterative Techniques for Closed Model Solution; 8. Synthesis Problems in Single-Resource Systems: Characterisation and Control of Achievable Performance 9. Control of Performance in Multiple-Resource Systems 10. A Queue with Server of Walking Type: Index Sommario/riassunto ""Analysis and Synthesis of Computer Systems"" presents a broad overview of methods that are used to evaluate the performance of computer systems and networks, manufacturing systems, and interconnected services systems. Aside from a highly readable style that rigorously addresses all subjects, this second edition includes new chapters on numerical methods for queuing models and on G-

networks, the latter being a new area of queuing theory that one of the

authors has pioneered. This book will have a broad appeal to students, practitioners and researchers in several different areas, including