1. Record Nr. UNINA9910797030303321 Autore Gautam Natarajan Titolo Analysis of queues: methods and applications / / by Natarajan Gautam Boca Raton, FL:,: CRC Press, an imprint of Taylor and Francis,, 2012 Pubbl/distr/stampa **ISBN** 0-429-09359-4 1-4398-0659-4 Edizione [First edition.] Descrizione fisica 1 online resource (788 p.) **Operations Research Series** Collana Classificazione BUS049000MAT029010TEC020000 Disciplina 519.82 Soggetti 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. Nota di contenuto Front Cover; Dedication; Contents; Preface; Acknowledgments; Author; List of Case Studies; List of Paradoxes; 1. Introduction; 2. Exponential Interarrival and Service Times: Closed-Form Expressions; 3. Exponential Interarrival and Service Times: Numerical Techniques and Approximations: 4. General Interarrival and/or Service Times: Closed-Form Expressions and Approximations; 5. Multiclass Queues under Various Service Disciplines; 6. Exact Results in Network of Queues: Product Form; 7. Approximations for General Queueing Networks 8. Fluid Models for Stability, Approximations, and Analysis of Time-Varying Queues9. Stochastic Fluid-Flow Queues: Characteristics and Exact Analysis: 10. Stochastic Fluid-Flow Queues: Bounds and Tail Asymptotics; Appendix A: Random Variables; Appendix B: Stochastic Processes; References Written with students and professors in mind, Analysis of Queues: Sommario/riassunto Methods and Applications combines coverage of classical queueing theory with recent advances in studying stochastic networks. Exploring a broad range of applications, the book contains plenty of solved

problems, exercises, case studies, paradoxes, and numerical examples.