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Altri autori (Persone)	FeuilletMathieu
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Nota di contenuto	Cover; Title Page; Copyright Page; Table of Contents; Preface; Chapter 1. Introduction; 1.1. Motivation; 1.2. Networks; 1.3. Traffic; 1.4. Queues; 1.5. Structure of the book; 1.6. Bibliography; Chapter 2. Exponential Distribution; 2.1. Definition; 2.2. Discrete analog; 2.3. An amnesic distribution; 2.4. Minimum of exponential variables; 2.5. Sum of exponential variables; 2.6. Random sum of exponential variables; 2.7. A limiting distribution; 2.8. A ""very"" random variable; 2.9. Exercises; 2.10. Solution to the exercises; Chapter 3. Poisson Processes; 3.1. Definition; 3.2. Discrete analog 3.3. An amnesic process 3.4. Distribution of the points of a Poisson process; 3.5. Superposition of Poisson processes; 3.6. Subdivision of a Poisson process; 3.7. A limiting process; 3.8. A ""very"" random process; 3.9. Exercises; 3.10. Solution to the exercises; Chapter 4. Markov Chains; 4.1. Definition; 4.2. Transition probabilities; 4.3. Periodicity; 4.4. Balance equations; 4.5. Stationary measure; 4.6. Stability and ergodicity; 4.7. Finite state space; 4.8. Recurrence and transience; 4.9. Frequency of transition; 4.10. Formula of conditional

transitions; 4.11. Chain in reverse time
4.12. Reversibility 4.13. Kolmogorov's criterion; 4.14. Truncation of a Markov chain; 4.15. Random walk; 4.16. Exercises; 4.17. Solution to the exercises; Chapter 5. Markov Processes; 5.1. Definition; 5.2. Transition rates; 5.3. Discrete analog; 5.4. Balance equations; 5.5. Stationary measure; 5.6. Stability and ergodicity; 5.7. Recurrence and transience; 5.8. Frequency of transition; 5.9. Virtual transitions; 5.10. Embedded chain; 5.11. Formula of conditional transitions; 5.12. Process in reverse time; 5.13. Reversibility; 5.14. Kolmogorov's criterion; 5.15. Truncation of a reversible process
5.16. Product of independent Markov processes 5.17. Birth-death processes; 5.18. Exercises; 5.19. Solution to the exercises; Chapter 6. Queues; 6.1. Kendall's notation; 6.2. Traffic and load; 6.3. Service discipline; 6.4. Basic queues; 6.5. A general queue; 6.6. Little's formula; 6.7. PASTA property; 6.8. Insensitivity; 6.9. Pollaczek-Khinchin's formula; 6.10. The observer paradox; 6.11. Exercises; 6.12. Solution to the exercises; Chapter 7. Queuing Networks; 7.1. Jackson networks; 7.2. Traffic equations; 7.3. Stationary distribution; 7.4. MUSTA property; 7.5. Closed networks
7.6. Whittle networks 7.7. Kelly networks; 7.8. Exercises; 7.9. Solution to the exercises; Chapter 8. Circuit Traffic; 8.1. Erlang's model; 8.2. Erlang's formula; 8.3. Engset's formula; 8.3.1. Model without blocking; 8.3.2. Model with blocking; 8.4. Erlang's waiting formula; 8.4.1. Waiting probability; 8.4.2. Mean waiting time; 8.5. The multiclass Erlang model; 8.6. Kaufman-Roberts formula; 8.7. Network models; 8.8. Decoupling approximation; 8.9. Exercises; 8.10. Solutions to the exercises; Chapter 9. Real-time Traffic; 9.1. Flows and packets; 9.2. Packet-level model; 9.3. Flow-level model
9.4. Congestion rate

Sommario/riassunto

The book presents some key mathematical tools for the performance analysis of communication networks and computer systems. Communication networks and computer systems have become extremely complex. The statistical resource sharing induced by the random behavior of users and the underlying protocols and algorithms may affect Quality of Service. This book introduces the main results of queuing theory that are useful for analyzing the performance of these systems. These mathematical tools are key to the development of robust dimensioning rules and engineering methods. A number of examples i

2. Record Nr.	UNINA9910968993003321
Autore	Jha Abhas Kumar <1966->
Titolo	Safer homes, stronger communities : : a handbook for reconstructing after natural disasters / / Abhas K. Jha ; with Jennifer Duyne Barenstein ... [and others]
Pubbl/distr/stampa	Washington, DC : , : World Bank, , [2010] copyright 2010
ISBN	9786612502149 9781282502147 128250214X 9780821382684 0821382683
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Descrizione fisica	xxxi, 370 pages : illustrations, maps ; ; 28 cm
Altri autori (Persone)	DuyneJennifer E. <1961->
Disciplina	363.5/83
Soggetti	Disaster relief Buildings - Repair and reconstruction Buildings - Natural disaster effects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Nota di contenuto	Cover; Title Page; Copyright; Contents; The Process of Response and Reconstruction; A Note to the Policy Maker; A Note to the Project Manager; Acknowledgments; About the Authors; Abbreviations; Guiding Principles; PART 1 Reconstruction Tasks and How to Undertake Them; Section 1 Assessing Damage and Defining Reconstruction Policy; Section 2 Planning Reconstruction; Section 3 Project Implementation; PART 2 Monitoring and Information Management; Chapter 17 Information and Communications Technology in Reconstruction; Chapter 18 Monitoring and Evaluation Chapter 19 Mitigating the Risk of Corruption PART 3 Information on World Bank Projects and Policies; Chapter 20 World Bank Response to Crises and Emergencies; Chapter 21 Safeguard Policies for World Bank Reconstruction Projects; Chapter 22 Financial Management in World Bank Reconstruction Projects; Chapter 23 Procurement in World Bank Reconstruction Projects; PART 4 Technical References; Disaster Types

and Impacts; Disaster Risk Management in Reconstruction; Sources of Disaster Data; Matrix of Disaster Project Features; Glossary; Index; Back cover

Sommario/riassunto

Best practices in post-disaster housing and community reconstruction are constantly evolving. Technology is changing how reconstruction is done, as is the frequency and severity of the disasters themselves. Reconstruction projects are increasingly focused on the need to reduce future risks by ensuring that what is rebuilt is safer and more disaster-resilient than what was there before. The expanding role of communities in managing community reconstruction, with financial and technical assistance from government, is another way reconstruction is changing.*Safer Homes, Stronger Communities: A Han*