1. Record Nr. UNINA9910366598003321 Autore Gertsbakh Ilya Titolo Network Reliability: A Lecture Course / / by Ilya Gertsbakh, Yoseph Shpungin Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 Pubbl/distr/stampa **ISBN** 981-15-1458-5 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (IX, 90 p. 48 illus., 27 illus. in color.) Collana SpringerBriefs in Electrical and Computer Engineering, , 2191-8112 Disciplina 621.382 Soggetti Electrical engineering Statistics Mathematical statistics Communications Engineering, Networks Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences Probability and Statistics in Computer Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto 1 Probability and Statistics: a short reminder -- 2 The concept of network -- 3 Network Static and Dynamic Reliability -- 4 Monte Carlo method for evaluating network reliability -- 5 Lomonosov's "Turnip" for Network Reliability evaluation. Sommario/riassunto This introductory book equips the reader to apply the core concepts and methods of network reliability analysis to real-life problems. It explains the modeling and critical analysis of systems and probabilistic networks, and requires only a minimal background in probability theory and computer programming. Based on the lecture notes of eight courses taught by the authors, the book is also self-contained, with no theory needed beyond the lectures. The primary focus is on essential "modus operandi," which are illustrated in numerous examples and

presented separately from the more difficult theoretical material.