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| Nota di contenuto | Model Based Testing with Labelled Transition Systems -- Model-Based Testing of Object-Oriented Reactive Systems with Spec Explorer -- Testing Real-Time Systems Using UPPAAL -- Coverage Criteria for State Based Specifications -- Testing in the Distributed Test Architecture -- Testing from X-Machine Specifications -- Testing Data Types Implementations from Algebraic Specifications -- From MC/DC to RC/DC: Formalization and Analysis of Control-Flow Testing Criteria -- Comparing the Effectiveness of Testing Techniques -- The Test Technology TTCN-3 -- Testability Transformation – Program Transformation to Improve Testability -- Modelling the Effects of Combining Diverse Software Fault Detection Techniques. |

Sommario/riassunto

This book constitutes the thoroughly refereed and peer-reviewed outcome of the Formal Methods and Testing (FORTEST) network - formed as a network established under UK EPSRC funding that investigated the relationships between formal (and semi-formal) methods and software testing - now being a subject group of two BCS Special Interest Groups: Formal Aspects of Computing Science (BCS FACS) and Special Interest Group in Software Testing (BCS SIGIST). Each of the 12 chapters in this book describes a way in which the study of formal methods and software testing can be combined in a manner that brings the benefits of formal methods (e.g., precision, clarity, provability) with the advantages of testing (e.g., scalability, generality, applicability).