1. Record Nr. UNINA9910483868603321

Titolo	Automated Software Testing : Foundations, Applications and Challenges / / edited by Ajay Kumar Jena, Himansu Das, Durga Prasad Mohapatra
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-2455-6
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (173 pages)
Collana	Services and Business Process Reengineering, , 2524-5503
Disciplina	005.14
Soggetti	Computational intelligence Data mining Engineering—Data processing Software engineering Computational Intelligence Data Mining and Knowledge Discovery Data Engineering Software Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Object Oriented Modeling of multifaceted service delivery system using connected governance -- Automated Requirements Extraction and Product Configuration Verification for Software Product Line -- Test Case Generation for Model Based Testing of Object Oriented Programs -- New Metrics for Predicting the Reliability of Individual Component based on Software Design Metrics -- Prediction priority of defective modules for testing resource allocation -- Early Reliability Prediction Model Integrating Halstead Metrics and Fuzzy Usage -- Investigation and Analysis of Power System Faults with Soft Computational Techniques -- Decision Making on Critical Component Using Combined Approach.
Sommario/riassunto	This book covers both theory and applications in the automation of software testing tools and techniques for various types of software (e.g. object-oriented, aspect-oriented, and web-based software). When software fails, it is most often due to lack of proper and thorough testing, an aspect that is even more acute for object-oriented, aspect-

oriented, and web-based software. Further, since it is more difficult to test distributed and service-oriented architecture-based applications, there is a pressing need to discuss the latest developments in automated software testing. This book discusses the most relevant issues, models, tools, challenges, and applications in automated software testing. Further, it brings together academic researchers, scientists, and engineers from a wide range of industrial application areas, who present their latest findings and identify future challenges in this fledging research area.