1. Record Nr.   UNINA9910616360803321

   Titolo   Optimization of Automated Software Testing Using Meta-Heuristic
                        Techniques / / edited by Manju Khari, Deepti Bala Mishra, Biswaranjan
                        Acharya, Ruben Gonzalez Crespo

   Pubbl/distr/stampa   Cham : , : Springer International Publishing : , : Imprint : Springer, ,
                        2022

   ISBN   3-031-07297-9

   Edizione   [1st ed. 2022.]

   Descrizione fisica   1 online resource (189 pages)

   Collana   EAI/Springer Innovations in Communication and Computing, , 2522-
                        8609

   Disciplina   005.14

   Soggetti   Computational intelligence
                        Data mining
                        Engineering - Data processing
                        Computational Intelligence
                        Data Mining and Knowledge Discovery
                        Data Engineering

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Nota di bibliografia   Includes bibliographical references and index.

   Nota di contenuto   Introduction -- Testing Fundamentals -- Strategies and Methods For
                        Test Cases -- Automated Testing Levels -- Polices and Plans for
                        Testing -- Test Organization -- Controlling and Monitoring Testing
                        Process -- Evaluating Automated Software Quality -- Defect Analysis
                        and Prevention -- Optimization -- Security Testing -- Conclusion.

   Sommario/riassunto   This book provides awareness of different evolutionary methods used
                        for automatic generation and optimization of test data in the field of
                        software testing. While the book highlights on the foundations of
                        software testing techniques, it also focuses on contemporary topics for
                        research and development. This book covers the automated process of
                        testing in different levels like unit level, integration level, performance
                        level, evaluation of testing strategies, testing in security level,
                        optimizing test cases using various algorithms, and controlling and
                        monitoring the testing process etc. This book aids young researchers in
                        the field of optimization of automated software testing, provides

academics with knowledge on the emerging field of AI in software development, and supports universities, research centers, and industries in new projects using AI in software testing. Supports the advancement in the artificial intelligence used in software development; Advances knowledge on artificial intelligence based metaheuristic approach in software testing; Encourages innovation in traditional software testing field using recent artificial intelligence. · .