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Descrizione fisica	1 online resource (XVI, 293 p. 80 illus.)
Collana	Programming and Software Engineering ; ; 7515
Disciplina	005.1
Soggetti	Software engineering Operating systems (Computers) Computer programming Computers Algorithms Pattern recognition Software Engineering Operating Systems Programming Techniques Computation by Abstract Devices Algorithm Analysis and Problem Complexity Pattern Recognition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	International conference proceedings.
Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	Advances in Evolutionary Multi-objective Optimization -- SBSE Meets Software Maintenance: Achievements and Open Problems -- Tutorial: High Performance SBSE Using Commodity Graphics Cards -- Evolving Robust Networks for Systems-of-Systems -- On the Application of SAT Solvers to the Test Suite Minimization Problem -- Evaluating the Importance of Randomness in Search-Based Software Engineering -- Putting the Developer in-the-Loop: An Interactive GA for Software Re-modularization -- Optimizing Threads Schedule Alignments to Expose

the Interference Bug Pattern -- Optimised Realistic Test Input Generation Using Web Services -- Improving Software Security Using Search-Based Refactoring -- Combining Search-Based and Adaptive Random Testing Strategies for Environment Model-Based Testing of Real-Time Embedded Systems -- Testing of Concurrent Programs Using Genetic Algorithms -- Reverse Engineering Feature Models with Evolutionary Algorithms: An Exploratory Study -- Searching for Pareto-optimal Randomised Algorithms. -- Automatically RELAXing a Goal Model to Cope with Uncertainty -- Boosting Search Based Testing by Using Constraint Based Testing -- Domain-Driven Reduction Optimization of Recovered Business Processes -- Evolving Human Competitive Spectra-Based Fault Localisation Techniques -- Applying Search Based Optimization to Software Product Line Architectures: Lessons Learned -- Problem-Specific Search Operators for Metaheuristic Software Architecture Design -- A Concept for an Interactive Search-Based Software Testing System -- A Search-Based Framework for Failure Reproduction -- Evolutionary Testing of PHP Web Applications with WETT.

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## Sommario/riassunto

This book constitutes the refereed proceedings of the Fourth International Symposium on Search-Based Software Engineering, SSBSE 2012, held in Riva del Garda, Italy in collocation with the 28th IEEE International Conference on Software Maintenance. The 15 revised full papers, 3 revised short papers, and 2 papers of the graduate track presented together with 2 keynote talks and 1 tutorial paper were carefully reviewed and selected from 38 initial submissions. Search-based Software Engineering (SBSE) studies the application of metaheuristic optimization techniques to various software engineering problems, ranging from requirements engineering to software testing and maintenance. The papers present current research in all areas of Search Based Software Engineering, including theoretical work, research on SBSE applications, empirical studies, and reports on industrial experience.

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