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Nota di contenuto	Testing and Debugging -- Analysis and remodeling of the DirtyCOW vulnerability by debugging and abstraction -- A Formal Technique for Concurrent Generation of Software Functional and Security Requirements in SOFL Specifications -- Distortion and Faults in Machine Learning Software -- A divide & conquer approach to testing concurrent Java programs with JPF and Maude -- Formal Verification -- An approach to modeling and verifying multi-level interrupt systems with TMSVL -- Towards Formal Verification of Neural Networks: A Temporal Logic Based Framework -- UMC4M: a Verification Tool via

Program Execution -- Parallel Runtime Verification Approach for Alternate Execution of Multiple Threads -- A Planning Approach based on APTL -- Solving Constraint optimization Problems Based on Mathematica and Abstraction -- A Forward Chaining Heuristic Search with Spatio-Temporal Control Knowledge -- Formal Development and Verification of Reusable Component in PAR Platform -- Formal Specification & Modeling -- A New Mutant Generation Algorithm based on Basic Path Coverage for Mutant Reduction -- Formal Specification and Model Checking of a Ride-sharing System in Maude -- Model Checking Python Programs with MSVL -- Software Analysis and Evolution -- Prediction of Function Removal Propagation in Linux Evolution -- Regression Models for Performance Ranking of Configurable Systems: A Comparative Study -- Combining Model Learning and Model Checking to Analyze Java Libraries -- Data Provenance Based System for Classification and Linear Regression in Distributed Machine Learning -- Software Analysis and Testing -- Metamorphic Testing in Fault Localization of Model Transformations -- A Fault Localization Method Based on Dynamic Failed Execution Blocks -- Adaptive Random Testing by Bisection and Comprehensive Distance -- CMM: A Combination-based Mutation Method For SQL Injection.

Sommario/riassunto

This book constitutes the thoroughly refereed workshop proceedings of the 9th International Workshop on Structured Object-Oriented Formal Language and Method, SOFL+MSVL 2019, held in Shenzhen, China, in November 2019. The 23 revised full papers included in the volume were carefully reviewed and selected from 43 submissions. They are organized in the following topical sections: testing and debugging, formal verification, problem solving, software analysis and evolution, and software analysis and testing.
