Record Nr. UNISA996418285403316 Tests and Proofs [[electronic resource]]: 14th International Conference, **Titolo** TAP 2020, Held as Part of STAF 2020, Bergen, Norway, June 22-23. 2020, Proceedings / / edited by Wolfgang Ahrendt, Heike Wehrheim Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-50995-8 Edizione [1st ed. 2020.] 1 online resource (xiii, 181 pages): illustrations Descrizione fisica Programming and Software Engineering;; 12165 Collana 005.14 Disciplina Soggetti Software engineering Programming languages (Electronic computers) Special purpose computers Architecture, Computer Artificial intelligence Software Engineering Programming Languages, Compilers, Interpreters Special Purpose and Application-Based Systems Computer System Implementation Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Benchmarking Combinations of Learning and Testing Algorithms for Nota di contenuto Active Automata Learning -- Mutation Testing of Smart Contracts at Scale -- Deductive Binary Code Verification Against Source-Code-Level Specifications -- Spatial-Temporal Model-Checking of Cyber-Physical Systems Using Graph Queries -- SAT Modulo Differential Equation Simulations -- Verified Runtime Assertion Checking for Memory Properties -- Testing for Race Conditions in Distributed Systems via SMT Solving -- SASA: a SimulAtor of Self-stabilizing Algorithms -- A Graphical Toolkit for the Validation of Requirements for Detect and Avoid Systems -- ScAmPER: Generating Test Suites to Maximise Code Coverage in Interactive Fiction Games.

Sommario/riassunto

This book constitutes the refereed proceedings of the 14th International Conference on Tests and Proofs, TAP 2020, held as part of the 4th World Congress on Formal Methods 2020, Bergen, Norway, in June 2020. The 7 regular papers, 1 short paper and 2 demonstration papers presented in this volume were carefully reviewed and selected from 209 submissions. The TAP conference promotes research in verification and formal methods that targets the interplay of proofs and testing: the advancement of techniques of each kind and their combination, with the ultimate goal of improving software and system dependability.