1. Record Nr. UNINA9910595028003321

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Titolo	Runtime Verification : 22nd International Conference, RV 2022, Tbilisi, Georgia, September 28–30, 2022, Proceedings / / edited by Thao Dang, Volker Stolz
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-031-17196-9
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (355 pages)
Collana	Lecture Notes in Computer Science, , 1611-3349 ; ; 13498
Altri autori (Persone)	StolzVolker
Disciplina	005.1 005.14
Soggetti	Software engineering Software Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Randomized First-Order Monitoring With Hashing -- Automated Surgical Procedure Assistance Framework using Deep Learning and Formal Runtime Monitoring -- Relaxing safety for metric first-order temporal logic via dynamic free variables -- Rule-based Runtime Mitigation against Poison Attacks on Neural Networks -- Optimizing Prestate Copies in Runtime Verification of Function Postconditions -- A Barrier Certificate-based Simplex Architecture with Application to Microgrids -- Optimal Finite-State Monitoring of Partial Traces -- Tainting in Smart Contracts: Combining Static and Runtime Verification -- Pace Transaction Monitoring of Smart Contracts -- Anticipatory Recurrent Monitoring with Uncertainty and Assumptions -- Abstract Monitors for Quantitative Specifications -- Organization Runtime Verification of Kotlin Coroutines -- A Solidity Aspect-Oriented Programming Tool with Applications in Runtime Verification -- Pace Towards Specificationless Monitoring of ProvenanceEmitting Systems -- A Python Library for Trace Analysis -- Lock Contention Classification for Java Intrinsic Locks -- TestSelector: Automatic Test Suite Selection for Student Projects -- Falcone Runtime verification for FMI-based co-simulation -- – An Ecosystem For Runtime Verification -- Real-time Visualization of Stream-based Monitoring Data -- Automating

numerical parameters along the evolution of a nonlinear system.

Sommario/riassunto

This book constitutes the refereed proceedings of the 22nd International Conference on Runtime Verification, RV 2022, held in Tbilisi, Georgia, during September 28-30, 2022. The 12 regular papers and 10 short papers presented in this book were carefully reviewed and selected from 40 submissions. The RV conference is concerned with all aspects of monitoring and analysis of hardware, software and more general system executions. Runtime verification techniques are crucial for system correctness, reliability, and robustness; they provide an additional level of rigor and effectiveness compared to conventional testing, and are generally more practical than exhaustive formal verification.