1. Record Nr.	UNINA9910760278703321
Titolo	Formal Methods and Software Engineering : 24th International Conference on Formal Engineering Methods, ICFEM 2023, Brisbane, QLD, Australia, November 21-24, 2023, Proceedings / / Yi Li and Sofiene Tahar, editors
Pubbl/distr/stampa	Singapore : , : Springer, , [2024] ©2023
ISBN	981-9975-84-0
Edizione	[First edition.]
Descrizione fisica	1 online resource (319 pages)
Collana	Lecture Notes in Computer Science Series ; ; Volume 14308
Disciplina	004.0151
Soggetti	Formal methods (Computer science) Software engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Talk: Verifying Compiler Optimisations -- Regular Papers: An Idealist's Approach for Smart Contract Correctness -- Active Inference of EFSMs Without Reset -- Learning Mealy Machines with Local Timers -- Compositional Vulnerability Detection with Insecurity Separation Logic -- Dynamic Extrapolation in Extended Timed Automata -- Formalizing Robustness against Character-level Perturbations for Neural Network Language Models -- Trace models of concurrent valuation algebras -- Branch and Bound for Sigmoid-like Neural Network Verification -- Certifying Sequential Consistency of Machine Learning Accelerators -- Guided Integration of Formal Verification in Assurance Cases -- Validation-Driven Development -- Incremental Property Directed Reachability -- Proving Local Invariants in ASTDs -- Doctoral Symposium Papers: Formal Verification of the Burn-to-Claim Blockchain Interoperable Protocol -- Early and systematic validation of formal models -- Verifying Neural Networks by Approximating Convex Hulls -- Eager to Stop: Efficient Falsification of Deep Neural Networks -- A Runtime Verification Framework For Cyber-physical Systems Based On Data Analytics And LTL Formula Learning -- Unified Verification of Neural Networks' Robustness and Privacy in Computer Vision -- IoT Software Vulnerability Detection Techniques through Large Language

Model -- Vulnerability Detection via Typestate-Guided Code Representation Learning.

Sommario/riassunto	This book constitutes the proceedings of the 24th International Conference on Formal Methods and Software Engineering, ICFEM 2023, held in Brisbane, QLD, Australia, during November 21–24, 2023. The 13 full papers presented together with 8 doctoral symposium papers in this volume were carefully reviewed and selected from 34 submissions, the volume also contains one invited paper. The conference focuses on applying formal methods to practical applications and presents papers for research in all areas related to formal engineering methods.