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Soggetti	Computer science Computer programming Software engineering Compilers (Computer programs) Application software Natural language processing (Computer science) Theory of Computation Programming Techniques Software Engineering Compilers and Interpreters Computer and Information Systems Applications Natural Language Processing (NLP)
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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.

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## 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.

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