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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 12860
Disciplina	005.1
Soggetti	Computer science Software engineering Computer systems Computers, Special purpose Computer simulation Microprogramming Theory of Computation Software Engineering Computer System Implementation Special Purpose and Application-Based Systems Computer Modelling Control Structures and Microprogramming
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Formal Methods for Robot Motion Planning with Time and Space Constraints (Extended Abstract) -- Temporal Reasoning for Intelligent Financial Services: Examples and Challenges -- On the complexity of timed pattern matching -- Stubborn Set Reduction for Timed Reachability and Safety Games -- Automatic Dynamic Parallelotope Bundles for Reachability Analysis of Nonlinear Systems -- Closing the Gap between Discrete Abstractions and Continuous Control: Completeness via Robustness and Controllability -- An Integer Static Analysis for Better Extrapolation in Uppaal -- Explaining Safety

Violations in Real-Time Systems -- DiffRNN: Differential verification of Recurrent Neural Networks -- Formal Abstraction and Synthesis of Parametric Stochastic Processes.

Sommario/riassunto

This book constitutes the refereed proceedings of the 19th International Conference on Formal Modeling and Analysis of Timed Systems, FORMATS 2021, held in Paris, France, in August 2021. The 8 full papers that were carefully reviewed and selected from 19 submissions are presented in this volume with 2 invited talks. The papers focus on topics such as probabilistic computation, logic and verification, robotic planning, complexity of timed pattern matching, safety violations in real-time systems, modal and temporal logics, and others.