

1. Record Nr.	UNINA9910143634803321
Titolo	Hybrid systems : computation and control : Third International Workshop, HSCC 2000, Pittsburgh, PA, USA, March 23-25, 2000 : proceedings // Nancy A. Lynch, Bruce H. Krogh, (Eds.)
Pubbl/distr/stampa	Berlin, Germany ; ; New York, New York : , : Springer, , [2000] Â©2000
ISBN	3-540-46430-1
Edizione	[1st ed. 2000.]
Descrizione fisica	1 online resource (XII, 465 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1790
Disciplina	004.1/9
Soggetti	Hybrid computers Digital control systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Invited Presentations -- Hybrid Models for Automotive Powertrain Systems: Revisiting a Vision -- Experiences in Designing and Using Formal Specification Languages for Embedded Control Software -- Model-Based Autonomous Systems for Robotic Space Exploration -- Models of Computation and Simulation of Hybrid Systems -- Selected Presentations -- Modular Specification of Hybrid Systems in Charon -- Approximate Reachability Analysis of Piecewise-Linear Dynamical Systems -- Maximal Safe Set Computation for Idle Speed Control of an Automotive Engine -- Optimization-Based Verification and Stability Characterization of Piecewise Affine and Hybrid Systems -- Invariant Sets and Control Synthesis for Switching Systems with Safety Specifications -- Verification of Hybrid Systems with Linear Differential Inclusions Using Ellipsoidal Approximations -- Theory of Optimal Control Using Bisimulations -- Behavior Based Robotics Using Hybrid Automata -- Hybrid Controllers for Hierarchically Decomposed Systems -- Beyond HyTech: Hybrid Systems Analysis Using Interval Numerical Methods -- Robust Undecidability of Timed and Hybrid Systems -- Towards a Theory of Stochastic Hybrid Systems -- Automatic Compilation of Concurrent Hybrid Factories from Product Assembly Specifications -- A Hybrid Feedback Regulator Approach to Control an Automotive Suspension System -- Ellipsoidal Techniques for

Reachability Analysis -- Uniform Reachability Algorithms -- On the Existence of Solutions to Controlled Hybrid Automata -- Nonlinear Stabilization by Hybrid Quantized Feedback -- Diagnosis of Quantised Systems by Means of Timed Discrete-Event Representations -- Existence and Stability of Limit Cycles in Switched Single Server Flow Networks Modelled as Hybrid Dynamical Systems -- Hybrid Systems Diagnosis -- Decidability and Complexity Results for Timed Automata and Semi-linear Hybrid Automata -- Level Set Methods for Computation in Hybrid Systems -- Towards Procedures for Systematically Deriving Hybrid Models of Complex Systems -- Computing Optimal Operation Schemes for Chemical Plants in Multi-batch Mode -- Hybrid Systems Verification by Location Elimination -- A Dynamic Bayesian Network Approach to Tracking Using Learned Switching Dynamic Models -- Stability of Hybrid Systems Using LMIs — A Gear-Box Application -- Invariance of Approximating Automata for Piecewise Linear Systems with Uncertainties -- Decidable Controller Synthesis for Classes of Linear Systems -- Towards a Geometric Theory of Hybrid Systems -- Controlled Invariance of Discrete Time Systems -- Dynamical Systems Revisited: Hybrid Systems with Zeno Executions.
