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Altri autori (Persone)	HespanhaJoao P TiwariAshish <1973->
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Soggetti	Computer science Computers, Special purpose Microprocessors Computer architecture Software engineering Theory of Computation Special Purpose and Application-Based Systems Processor Architectures Computer Science Logic and Foundations of Programming Software Engineering
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Nota di contenuto	Invited Talks -- Motion Coordination for Multi-agent Networks -- Towards a Third Generation of Control Systems -- Hybrid Systems— And Everything Else -- Regular Papers -- Behavioural Approximations for Restricted Linear Differential Hybrid Automata -- Bounded Model Checking for GSMP Models of Stochastic Real-Time Systems -- On the Stability of Zeno Equilibria -- Reachability Analysis for Controlled Discrete Time Stochastic Hybrid Systems -- Output-Based Optimal Timing Control of Switched Systems -- Hybrid Modelling and Control of the Common Rail Injection System -- Event-Based Model Predictive Control and Verification of Integral Continuous-Time Hybrid Automata -- Improving Efficiency of Finite Plans by Optimal Choice of Input Sets

-- Optimality Zone Algorithms for Hybrid Systems: Efficient Algorithms for Optimal Location and Control Computation -- Approximate Reachability Computation for Polynomial Systems -- A Lattice Theory for Solving Games of Imperfect Information -- Observability of Hybrid Automata by Abstraction -- Reconstruction of Switching Thresholds in Piecewise-Affine Models of Genetic Regulatory Networks -- Decision Problems for the Verification of Real-Time Software -- Laplacian Sheep: A Hybrid, Stop-Go Policy for Leader-Based Containment Control -- Optimal Control of Piece-Wise Polynomial Hybrid Systems Using Cylindrical Algebraic Decomposition -- The Reachability Problem for Uncertain Hybrid Systems Revisited: A Viability Theory Perspective -- Efficient Computation of Reachable Sets of Linear Time-Invariant Systems with Inputs -- Verification Using Simulation -- Reachability Analysis of Large-Scale Affine Systems Using Low-Dimensional Polytopes -- Simultaneous Optimization of Continuous Control Inputs and Discrete State Waypoints -- Approximate Abstraction of Stochastic Hybrid Automata -- A Fully Automated Framework for Control of Linear Systems from LTL Specifications -- Reachability Analysis of Multi-affine Systems -- Approximation, Sampling and Voting in Hybrid Computing Systems -- Computational Methods for Reachability Analysis of Stochastic Hybrid Systems -- R-Charon, a Modeling Language for Reconfigurable Hybrid Systems -- Estimation and Conflict Detection in Human Controlled Systems -- Stability Analysis of Hybrid Systems Via Small-Gain Theorems -- Stochastic Hybrid Delay Population Dynamics -- Finite Gain L_p Stabilization Is Impossible by Bit-Rate Constrained Feedback -- Specification and Analysis of Distributed Object-Based Stochastic Hybrid Systems -- Verifying Average Dwell Time by Solving Optimization Problems -- Interchange Format for Hybrid Systems: Abstract Semantics -- Model Checking of Hybrid Systems: From Reachability Towards Stability -- A Feedback Control Motivation for Generalized Solutions to Hybrid Systems -- Fixed Point Iteration for Computing the Time Elapse Operator -- Mixed Initial-Boundary Value Problems for Scalar Conservation Laws: Application to the Modeling of Transportation Networks -- Beyond Zeno: Get on with It!

Sommario/riassunto

These are the proceedings of the 9th International Workshop on Hybrid Systems: Computation and Control, HSCC 2006, March 2006. 39 revised papers are presented together with the abstracts of 3 invited talks. The focus is on modeling, analysis, and implementation of dynamic and reactive systems involving both discrete and continuous behaviors. Topics addressed include tools for analysis and verification, control and optimization, modeling, engineering applications, and new directions in language support and implementation.