1.

Record Nr.	UNISA996466115603316
Titolo	Hybrid Systems II [[electronic resource] /] / edited by Panos Antsaklis, Wolf Kohn, Anil Nerode, Shankar Sastry
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1995
ISBN	3-540-47519-2
Edizione	[1st ed. 1995.]
Descrizione fisica	1 online resource (IX, 575 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 999
Disciplina	629.8/9
Soggetti	Microprocessors
	Control engineering
	Computers
	Special purpose computers
	Software engineering
	Computer logic
	Processor Architectures
	Control and Systems Theory
	Theory of Computation
	Special Purpose and Application-Based Systems
	Software Engineering
	Logics and Meanings of Programs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Symbolic controller synthesis for discrete and timed systems -- A Calculus of Stochastic Systems for the specification, simulation, and hidden state estimation of hybrid stochastic/non-stochastic systems -- Condensation of information from signals for process modeling and control -- On the automatic verification of systems with continuous variables and unbounded discrete data structures -- On dynamically consistent hybrid systems -- A self-learning neuro-fuzzy system -- Viable control of hybrid systems -- Modeling and stability issues in hybrid systems -- Hierarchical hybrid control: a case study -- Hybrid systems and quantum automata: Preliminary announcement -- Planar

hybrid systems -- Programming in hybrid constraint languages -- A note on abstract interpretation strategies for hybrid automata -- HyTech: The Cornell Hybrid Technology Tool -- Hybrid systems as Finsler manifolds: Finite state control as approximation to connections -- Constructing hybrid control systems from robust linear control agents -- Controllers as fixed points of set-valued operators -- Verification of hybrid systems using abstractions -- Control of continuous plants by symbolic output feedback -- Hybrid control of a robot — a case study -- Verifying time-bounded properties for ELECTRE reactive programs with stopwatch automata -- Inductive modeling: A framework marrying systems theory and non-monotonic reasoning -- Semantics and verification of hierarchical CRP programs -- Interface and controller design for hybrid control systems -- Hybrid objects -- Modelling of hybrid systems based on extended coloured Petri nets -- DEVS framework for modelling, simulation, analysis, and design of hybrid systems -- Synthesis of hybrid constraint-based controllers.

| Sommario/riassunto | This book documents the scientific outcome of the Third International Workshop on Hybrid Systems, held in Ithaca, NY, USA, in October 1994. It presents a selection of carefully reviewed and revised full papers chosen from the workshop contribution and is the successor to LNCS 736, the seminal "Hybrid Systems" volume edited by Grossman, Nerode, Ravn, and Rischel. Hybrid systems are models for networks of digital and continuous devices, in which digital control programs sense and supervise continuous and discrete plants governed by differential or difference equations. The investigation of hybrid systems is creating a new and fascinating discipline bridging mathematics, computer science, and control engineering. |