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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1135
Disciplina	004/.33
Soggetti	Computers Programming languages (Electronic computers) Operating systems (Computers) Computer logic Special purpose computers Microprocessors Theory of Computation Programming Languages, Compilers, Interpreters Operating Systems Logics and Meanings of Programs Special Purpose and Application-Based Systems Processor Architectures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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Nota di contenuto	On the semantics of group communication -- Unifying verification paradigms -- Formal methods for early fault detection -- Retiming techniques for Statecharts -- Compiling Argos into Boolean equations -- Real-time mode-machines -- A calculus for timed automata -- Minimizable timed automata -- Weak chop inverses and liveness in Mean-Value Calculus -- Synthesizing controllers from Duration Calculus -- Sampling semantics of Duration Calculus -- The production cell: A verified real-time system -- Verification-driven

development of a collision-avoidance protocol for the Ethernet -- Exhaustive computation of the scheduled task execution sequences of a real-time application -- Scheduling Data Flow programs in Hard Real-Time environments -- Dynamic scheduling in the presence of faults: Specification and verification -- Efficient broadcasting on faulty star networks -- Model checking for extended timed temporal logics -- Partial orders and verification of real-time systems -- Toward a modal theory of types for the λ -calculus -- Graphical formalization of real-time requirements -- On specifying real-time systems in a causality-based setting -- Verification of embedded systems using synchronous observers -- Compositionality in real-time shared variable concurrency -- Formal analysis of a real-time kernel specification -- Mona: Decidable arithmetic in practice -- Verifying synchronous reactive systems programmed in ESTEREL -- AutoFocus — A tool for distributed systems specification -- A tool for translation of VHDL descriptions into a formal model and its application to formal verification and synthesis -- EVGC: A tool for visualizing LOTOS behavioural specifications.

Sommario/riassunto

This volume constitutes the refereed proceedings of the Fourth International Symposium on Formal Techniques in Real-Time and Fault-Tolerant Systems, FTRTFTS '96, held in Uppsala, Sweden, in September 1996. The 22 revised full papers presented were selected from a total of 61 submissions; also included are three invited contributions and five tools demonstrations. The papers are organized in sections on state charts, timed automata, duration calculus, case studies, scheduling, fault tolerance, specification, and verification.
