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Altri autori (Persone)	BeckertBernhard
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Nota di contenuto	The ASCENS Project -- ASCENS: Engineering Autonomic Service-Component Ensembles -- A Language-Based Approach to Autonomic Computing -- A Survey on Basic Connectors and Buffers -- The EternalS Coordination Action -- Synthesis-Based Variability Control: Correctness by Construction -- Modeling Application-Level Management of Virtualized Resources in ABS -- HATS Abstract Behavioral Specification: The Architectural View -- Automatic Service Categorisation through Machine Learning in Emergent Middleware -- Towards a Model- and Learning-Based Framework for Security Anomaly Detection -- Enhancing Model Driven Security through Pattern Refinement Techniques -- Project Zeppelin: A Modern Web Application

Development Framework -- The ParaPhrase Project -- Managing Adaptivity in Parallel Systems -- The ParaPhrase Project: Parallel Patterns for Adaptive Heterogeneous Multicore Systems -- Paraphrasing: Generating Parallel Programs Using Refactoring -- An Abstract Annotation Model for Skeletons -- The PRO3D Project -- PRO3D, Programming for Future 3D Manycore Architectures: Project Interim Status -- Thermal-Aware Task Assignment for Real-Time Applications on Multi-Core Systems -- Component Assemblies in the Context of Manycore -- Low-Cost Dynamic Voltage and Frequency Management Based upon Robust Control Techniques under Thermal Constraints.

Sommario/riassunto

Formal methods have been applied successfully to the verification of medium-sized programs in protocol and hardware design for some time. However, their application to the development of large systems requires more emphasis on specification, modeling, and validation techniques supporting the concepts of reusability and modifiability, and their implementation in new extensions of existing programming languages like Java. This book contains 20 revised papers submitted after the 10th Symposium on Formal Methods for Components and Objects, FMCO 2011, which was held in Turin, Italy, in October 2011. Topics covered include autonomic service-component ensembles; trustworthy eternal systems via evolving software, data, and knowledge; parallel patterns for adaptive heterogeneous multicore systems; programming for future 3D architectures with many cores; formal verification of object oriented software; and an infrastructure for reliable computer systems.