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	Computer programming
	Management information systems
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Nota di contenuto	Components as Location Graphs A Formal Approach to Autonomic Systems Programming: The SCEL Language Compositional Approaches Verified Service Compositions by Template-Based Construction Compositional Verification of Asynchronously Communicating Systems Compositional Analysis Using Component-Oriented Interpolation Adaptation and Evolution Impact Models for Architecture-Based Self-adaptive Systems Decentralised Evaluation of Temporal Patterns over Component-Based Systems at

Runtime -- Formal Rules for Reliable Component-Based Architecture Evolution -- Application and Experience -- Solving Parity Games in Scala -- Synthesis of a Reconfiguration Service for Mixed-Criticality Multi-Core Systems: An Experience Report -- Tools -- From HELENA Ensemble Specifications to Executable Code -- MAccS: A Tool for Reachability by Design -- MPASS: An Efficient Tool for the Analysis of Message-Passing Programs -- Scheduling, Time and Hybrid Systems Widening the Schedulability of Hierarchical Scheduling Systems --Adding Formal Meanings to AADL with Hybrid Annex -- Component-Based Modeling and Observer-Based Verification for Railway Safety-Critical Applications -- Other Verification Approaches -- Intransitive Non-Interference by Unfolding -- Reduction and Abstraction Techniques for BIP -- Compositionality for Quantitative Specifications -- Safety and Liveness of Composition -- Algorithmic Verification of Procedural Programs in the Presence of Code Variability -- Place-Liveness of ComSA Applications -- Weakness: Verifying Correctness on TSO Architectures.

## Sommario/riassunto

This book constitutes revised selected papers from the International Symposium on Formal Aspects of Component Software, FACS 2014, held in Bertinoro, Italy, in September 2014. The 20 full papers presented in this volume were carefully reviewed and selected from 44 submissions. They are organized in topical sections named: compositional approaches; adaptation and evolution; application and experience; tools; scheduling, time and hybrid systems; other verification approaches and safety and liveness of composition. The volume also contains two invited talks, one full paper and one abstract.