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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Invited Papers -- Embedded Systems Unsuitable for Object Orientation -- On Architectural Stability and Evolution -- Encapsulating Failure Detection: From Crash to Byzantine Failures -- Contextware: Bridging Physical and Virtual Worlds -- Embedded Systems -- Evaluating Performance and Power of Object-Oriented Vs. Procedural Programming in Embedded Processors -- OMC-INTEGRAL Memory Management -- Language Issues of Compiling Ada to Hardware -- Case Studies -- Software Development Reengineering — An Experience Report -- Development of a Control System for Teleoperated Robots Using UML and Ada95 -- Using a Secure Java Micro-kernel on Embedded Devices for the Reliable Execution of Dynamically Uploaded Applications -- Real-Time Systems -- A POSIX-Ada Interface for Application-Defined Scheduling -- High-Integrity Systems -- Closing the Loop: The Influence of Code Analysis on Design -- High-Integrity Systems Development for Integrated Modular Avionics Using VxWorks and GNAT -- Ada Language -- How to Use GNAT to Efficiently Preprocess New Ada Sentences -- Exposing Uninitialized Variables: Strengthening and Extending Run-Time Checks in Ada -- Adding Design by Contract to the Ada Language -- Program Analysis -- Static Dependency Analysis for Concurrent Ada 95 Programs -- DataFAN: A Practical Approach to Data Flow Analysis for Ada 95 -- Prioritization of

Test Cases in MUMCUT Test Sets: An Empirical Study -- Tools -- About the Difficulties of Building a Pretty-Printer for Ada -- A Tailorable Distributed Programming Environment -- Distributed Systems -- Modeling and Schedulability Analysis of Hard Real-Time Distributed Systems Based on Ada Components -- Transparent Environment for Replicated Ravenscar Applications -- Concurrency Control in Transactional Drago -- Libraries, APIs, and Bindings -- An Ada Binding to the IEEE 1003.1q (POSIX Tracing) Standard -- GNAT Ada Database Development Environment -- Object-Orientation -- Ada, Interfaces and the Listener Paradigm -- Using Object Orientation in High Integrity Applications: A Case Study.

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Sommario/riassunto

This book constitutes the refereed proceedings of the 7th International Conference on Reliable Software Technologies, Ada-Europe 2002, held in Vienna, Austria, in June 2002. The 24 revised full papers presented together with four invited papers were carefully reviewed and selected for inclusion in the proceedings. The papers are organized in topical sections on embedded systems, case studies, real-time systems, high-integrity systems, Ada language issues, program analysis, tools, distributed systems, and libraries and APIs.

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