1. Record Nr. UNINA9910484830203321 Reliable Software Technologies - Ada-Europe 2016: 21st Ada-Europe **Titolo** International Conference on Reliable Software Technologies, Pisa, Italy, June 13-17, 2016, Proceedings / / edited by Marko Bertogna, Luís Miguel Pinho, Eduardo Quiñones Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-39083-X Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (XIV, 213 p. 59 illus.) Programming and Software Engineering; ; 9695 Collana Disciplina 005 Soggetti Programming languages (Electronic computers) Software engineering Special purpose computers Computer logic Mathematical logic Programming Languages, Compilers, Interpreters Software Engineering Special Purpose and Application-Based Systems Logics and Meanings of Programs Mathematical Logic and Formal Languages Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Why the Expressive Power of Programming Languages such as Ada Is Nota di contenuto Needed for Future Cyber Physical Systems -- Modeling and Analysis of Data Flow Graphs Using the Digraph Real-Time Task Model --Eliminating Data Race Warnings Using CSP -- Real-Time Stream Processing in Java -- Addressing the Regression Test Problem with Change Impact Analysis for Ada -- Test Case Prioritization Using Online Fault Detection Information -- An Experience in Ada Multicore Programming: Parallelisation of a Model Checking Engine -- Lessons Learned in a Journey Toward Correct-by-Construction Model-Based Development -- Extension of the Ocarina Tool Suite to Support Reliable

Replication-Based Fault-Tolerance -- Kronecker Algebra for Static

Analysis of Barriers in Ada -- An Empirical Investigation of Eager and Lazy Preemption Approaches in Global Limited Preemptive Scheduling -- The Polling Effect on the Schedulability of Distributed Real-Time Systems -- Combining Time-Triggered Plans with Priority Scheduled Task Sets. .

## Sommario/riassunto

This book constitutes the refereed proceedings of the 21st Ada-Europe International Conference on Reliable Software Technologies, Ada-Europe 2016, held in Pisa, Italy, in June 2016. The revised 12 full papers presented together with one invited paper were carefully reviewed and selected from 28 submissions. They are organized in topical sections on concurrency and parallelism, testing and verification, program correctness and robustness, and real-time systems.