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Altri autori (Persone)	RealJorge VardanegaT (Tullio)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Keynote Talks -- What to Make of Multicore Processors for Reliable Real-Time Systems? -- Control Co-design: Algorithms and Their Implementation -- Multicores and Ada -- Dispatching Domains for Multiprocessor Platforms and Their Representation in Ada -- Implementing Multicore Real-Time Scheduling Algorithms Based on

Task Splitting Using Ada 2012 -- Preliminary Multiprocessor Support of Ada 2012 in GNU/Linux Systems -- Software Dependability -- Practical Limits on Software Dependability: A Case Study -- Program Verification in SPARK and ACSL: A Comparative Case Study -- Static Versioning of Global State for Race Condition Detection -- Critical Systems -- Using Hardware Support for Scheduling with Ada -- Cache-Aware Development of High-Integrity Systems -- Preservation of Timing Properties with the Ada Ravenscar Profile -- Real-Time Systems -- Towards the Definition of a Pattern Sequence for Real-Time Applications Using a Model-Driven Engineering Approach -- Scheduling Configuration of Real-Time Component-Based Applications -- The Evolution of Real-Time Programming Revisited: Programming the Giotto Model in Ada 2005 -- Language Technology -- AdaStreams: A Type-Based Programming Extension for Stream-Parallelism with Ada 2005 -- A Comparison of Generic Template Support: Ada, C++, C#, and JavaTM -- Towards Ada 2012: An Interim Report -- Distribution and Persistency -- Managing Transactions in Flexible Distributed Real-Time Systems -- An Efficient Implementation of Persistent Objects.

## Sommario/riassunto

The 15th edition of the International Conference on Reliable Software Technologies - Ada-Europe 2010--took place in the attractive venue of Valencia, deservedly making Spain the most visited country in the conference series. Previous editions of the conference were held in Switzerland (Montreux 1996 and Geneva 2007), United Kingdom (London 1997 and York 2005), Sweden (Uppsala 1998), Spain (Santander 1999 and Palma de Mallorca 2004), Germany (Potsdam 2000), Belgium (Leuven 2001), Austria (Vienna 2002), France (Toulouse 2003 and Brest 2009), Portugal (Porto 2006), and Italy (Venice 2008). The conference represents the main yearly event promoted by Ada-Europe, in cooperation with ACM SIGAda. This third visit to Spain acknowledges the fact that Ada-Spain is the largest national association of Ada-Europe, and is a major contributor to Ada-Europe's activities. This year the conference was organized by members of the Instituto de Automática e Informática Industrial (AI2) and the Departamento de Informática de Sistemas y Computadores (DISCA) of the Universidad Politécnica de Valencia. The year 2010 is important for Ada: this is the year when the new amendment to the language (known as Ada 2012) is taking its definitive shape. The conference program was not unaware of this fact, and these proceedings reflect it by including papers about multicore programming in Ada, along with an overview of the key elements of the Ada 2012 amendment in the making. The scientific program of the conference, which feeds these proceedings, also included sessions devoted to software dependability, critical, real-time and distributed systems, and language technology, all under the more general heading of "Reliable Software Technologies." This program is the result of a thorough selection process of 17 submissions out of 42 received from authors of 19 different countries.