



**5th International
Conference on
Reliable Software
Technologies**

Ada-Europe 2000

June 26-30, 2000, Potsdam
(Berlin), Germany

**Call for Participation and Preliminary
Program**

The 5th International Conference on Reliable Software Technologies (Ada-Europe 2000) will take place in Potsdam (near Berlin), Germany, from June 26 to 30, 2000. The conference offers a technical program and exhibition from Tuesday to Thursday, and a series of tutorials on Monday and Friday.

The conference provides an international forum for researchers, developers and users of reliable software technologies. Presentations and discussions cover applied and theoretical work currently conducted to support the development and maintenance of software systems. The technical program includes keynote addresses, session papers by the international community with refereed contributions from Argentina, Australia, Austria, Canada, China, France, Germany, Italy, Japan, Norway, Spain, Sweden, Switzerland, United Kingdom and the USA. The proceedings of the conference will be published in the LNCS Series by Springer. There will be additional short presentations on various interesting topics and two sessions, in which vendors present their commercial products. An exhibition concurrent to the conference offers an opportunity to explore the latest developments by the commercial marketplace. The tutorials on Monday and Friday offer an excellent opportunity for obtaining in-depth knowledge in important technologies of the field.

Potsdam is the capital of the state Brandenburg and situated a few miles west of Berlin, the capital of Germany. The venue of the conference is the hotel "Seminaris". It is situated at the waterfront of a picturesque lake and near the world-famous palace "Sanssouci". Social events on Tuesday and Wednesday, including a musical appearance of "Lady Ada", round out a week well spent to catch up on the latest developments in reliable software technologies. The conference is supported and sponsored by Ada Europe, Ada Deutschland, ACM SIGAda, Gesellschaft für Informatik, Forschungszentrum Karlsruhe, ACT Europe, Aonix, CAS GmbH, Green

Hills, Information Processing Ltd., Irvine, PeerLogic, Praxis Critical Systems and Rational.

Conference Schedule (June 27-30, 2000)

	Tuesday		Wednesday		Thurs
900 - 1015	Opening Session		Keynote Session		Keynote Session
1045 - 1230	APIs and Components		Real Time and Safety Critical Systems		Formal Analysis Methods
	Lunch		Lunch		Lunch
1400 - 1545	Risk & Reliability Management	Short Papers	Testing	Vendor Presentations	UML
1615 - 1800	Tools	Vendor Presentations	ASIS	Short Papers	Closing Session
	Evening performance, featuring Lady Ada		Banquet		

Sessions

Real-Time and Safety-Critical Systems

An Open Ravenscar Real-Time Kernel for GNAT, *Juan A. de la Puente, José F. Ruiz, Juan Zamorano*
Object-Oriented Programming and Protected Objects in Ada 95, *A.J. Wellings, B. Johnson, B. Sanden, J. Kienzle, T. Wolf and S. Michell*
Is An Ada Lint Necessary? *Björn Källberg*

Tools

Using Java APIs with Native Ada Compilers, *Shayne Flint, Brian Dobbing*
Static Worst-Case Execution Time Analysis of Synchronous Programs, *Thomas Ringler*
A Supporting Tool for Development of Self-Measurement Ada Programs, *Yusuke Nonaka, Jingde Cheng and Kazuo Ushijima*

APIs and Components

On Persistent and Reliable Streaming in Ada, *Jörg Kienzle, Alexander Romanovsky*
Reengineering the Booch Component Library *Jordi Marco, Xavier Franch*
GtkAda: Design and Implementation of a High Level Binding in Ada, *Emmanuel Briot, Arnaud Charlet, Joel Brobecker*

ASIS

ASIS-for-GNAT: A Report of Practical Experiences, *Sergey Rybin, Vasily Fofanov, Alfred Strohmeier, Aleksei Kuchumov*
Generation of Interface Description Documents Using ASIS, *Steven V. Hovater*

An Ada95 Programming Style Checker Using the GNAT ASIS Implementation, *Patrick Closhen, Hans-Juergen Hoffmann*

Risk and Reliability Management

Enhancements in Software Project Risk Management, *Peter Wieland, Frode Høgberg and Kristin Strømseng*

Constructing Reliable Embedded Systems Using the Results of System Safety Analysis, *Giuseppe Mauri, Stefan Scheer*

An Application of the Chains-of-Rare-Events Model to Software Development Failure Prediction, *N. R. Barraza, J. D. Pfefferman, B. Cernuschi-Frias, and F. Cernuschi*

UML

Interaction of active objects via shared protected objects: UML design and Ada realisation, *Horst A. Neumann*

Analysis, Design, and Implementation of an Object-Oriented Framework in Ada95, *Detlef Schmitt*
MTS: Integrating UML, HOOD, Ada in a Full Ada Operational Software Project, *Agusti Canals, Thierry Lacomme, Sévrines Carles, Franois Normend*

Formal Analysis Methods

Symbolic Dataflow Analysis for Detecting Deadlocks in Ada Tasking Programs, *Johann Blieberger, Bernd Burgstaller, and Bernhard Scholz*

Exceptions in OO languages: Using them and reasoning about them, *Neelam Soundarajan, Stephen Fridella*

(True) Polymorphism in SPARK2000, *Tse-Min Lin, John A. McDermid*

Testing:

Improving the Reliability of Object-Oriented Software through Object-level Behavioral Simulation, *Mahesh Deshpande, Frank Coyle and Jeff Tian*

Results of an Investigation Into Software Integration Testing Automation, *Simon Kiteley, Jonathan Draper*

On minimal essential subsets and minimal representative sets, *T. Y. Chen and M. F. Lau*

Tutorials (June 26 and June 31, 2000)

Brosgol, Ben, **Java for Ada Programmers**;
Gonzalez Harbour, Michael, **Real-Time POSIX**;
Cook, David and Dupaix, Les, **Ada95 for Beginners**;
Cook, David and Dupaix, Les, **Ada95 for Ada83**

Programmers;

Hausen, Hans-Ludwig, **Software Metrology Basics**;
Rosen, Jean-Pierre, **The HOOD 4 design method**;
Tian, Jeff, **Tree-Based Reliability Models (TBRMs)**;

Heaney, Matthew, **Implementing Design Patterns in Ada95**;

Harbaugh John, **High Integrity Ada Tasking**;
Briot, Emmanuel, **GtkAda, an Ada95 object-oriented graphic toolkit**;

Rybin, Sergey and Fofanov, Vasily, **Building Ada development tools with ASIS for-GNAT**;

Leringe, Örjan, **Windows development with Ada**;
Gasperoni, Franco, **Developing Ada Applications for the Java Platform with JGNAT**

Conference and hotel registration

The hotel *Potsdam* is the conference location. Hotel accommodations can be reserved along with your conference registration. Please make hotel reservations only via the conference registration form (not directly with the hotel). Hotel and conference registration forms are available on-line at the conference home page. For printed registration forms please send email to: christine.harms@gmd.de or keller@iai.fzk.de.

Members of Ada-Europe (either direct or indirect members), members of ACM and members of Ada Deutschland get a discount on the full conference fee. Significant early registration discounts apply until May 12th.

For further information, please contact:

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For **registration materials** and **up-to-date information** on the program, the tutorials, invited speakers, and daily schedules, please visit:

<http://www.ada-europe.org/conference2000.html>