5th International Conference on

Reliable Software Technologies

Ada-Europe 2000

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

Call for Participation and Preliminary Programme

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 programme 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 programme 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. Both cities offer many historic and modern attractions and an exciting environment to visitors. The venue of the conference is the hotel „Seminaris“ specializing in conferences and meetings. 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 e.V., ACM SIGAda, Gesellschaft für Informatik e.V., Forschungszentrum Karlsruhe, ACT Europe, Aonix, CAS GmbH, Green Hills, Information Processing Ltd., Irvine, PeerLogic, Praxis Critical Systems and Rational.

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

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**

Programme Co-Chairs

Hubert B. Keller (Conference Chair), Forschungszentrum Karlsruhe, Inst. of Applied Computer Science, P.O. Box 3640, D-76021 Karlsruhe, Germany, keller@iai.fzk.de

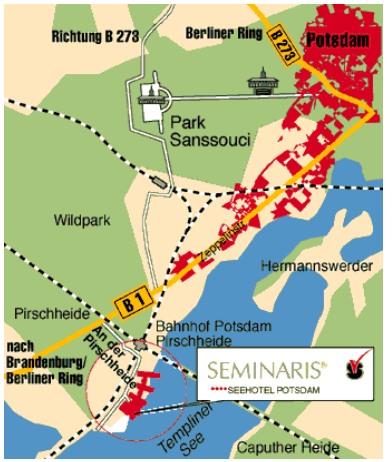
Erhard Ploedereder, University of Stuttgart, Institute of Informatics, Breitwiesenstr. 20-22, D-70565 Stuttgart, Germany, ploedere@informatik.uni-stuttgart.de

Programme Committee

Ángel Álvarez, Technical University of Madrid; Lars Asplund, Uppsala University; Ted Baker, Florida State University; Stéphane Barbey, Paranor AG; John Barnes, JBI; Johann Blieberger, Technical University Vienna; Jim Briggs, University of Portsmouth; Benjamin Brosgol, Aonix; Dirk Craeynest, OFFIS nv/sa; Peter Dencker, Aonix GmbH; Marc Gobin, Royal Military Academy, Belgium; Peter Göhner, University of Stuttgart; Gerhard Goos, University of Karlsruhe; Michael González Harbour, Universidad de Cantabria; Günter Hommel, TU Berlin; Yvon Kermarrec, ENST de Bretagne Fabrice Kordon, Université P. & M. Curie; Rudolf Landwehr, CCI; Franco Mazzanti, Istituto di Elaborazione della Informazione, CNR; Paolo Panaroni, Intecs Sistemi; Laurent Pautet, ENST Paris; Jean-Pierre Rosen, Adalog ; Edmond Schonberg, New York University & ACT; Alfred Strohmeier, Swiss Federal Institute of Technology, Lausanne; S. Tucker Taft, AverStar, Inc.; Theodor Tempelmeier, FH Rosenheim; Tullio Vardanega, European Space Agency; Debora Weber-Wulff, TFH Berlin; Andy Wellings, University of York; Jürgen Winkler, University of Jena

The hotel is the conference location. Other hotels are in the city of Potsdam, but are not within walking distance from the conference venue. A one-night deposit must be enclosed with the reservation request. The balance due will be paid directly to the hotel upon checking out. Please make hotel reservations only via the conference registration form (not directly with the hotel). Prices per room and day, breakfast and taxes included.

SeeHotel Potsdam, An der Pirschheide,
D-14471 Potsdam,
SINGLE ROOM 82 EUR,
DOUBLE ROOM 113 EUR (2 pers.)



For further information, please contact:

Christine Harms (Conference Secretariat)
c/o GMD, Schloss Birlinghoven,
D-53754 Sankt Augustin, Germany
Tel.: ++49 2241/14-2473,
Fax: ++49 2241/14-2472
email: christine.harms@gmd.de

Hubert B. Keller (Conf. Chair)
Forschungszentrum Karlsruhe,
Institute of Applied Computer Science, P.O Box 3640,
D-76021 Karlsruhe, Germany
email: 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. For up-to-date information on the programme, the tutorials, invited speakers, and daily schedules, please visit *http://www.ada-europe.org/conference2000.html*