

Call for Participation – SIGAda 2003

7-11 December 2003, San Diego, California, USA

Sponsored by ACM SIGAda

<http://www.acm.org/sigada/conf/sigada2003>

(Approval pending by ACM)

Constructing highly reliable software is an engineering challenge that can now be met in many domains. The application of software engineering methods, tools, and languages interrelate to make the challenge easier or more difficult. This conference focuses on the interaction between these three aspects of software engineering, especially how features in Ada have and will permit the development of the tools and methods that result in correctness, reliability, and quality of the resulting software. Especially welcome are papers that analyze Ada with respect to these factors or in comparison with other languages. This conference will gather industrial experts, educators, software engineers, and researchers interested in developing, analyzing, and certifying reliable, cost-effective software. Technical or theoretical papers as well as experience reports with a focus on Ada are solicited. Possible topics include but are not limited to:

- Reliability needs and styles
- Safety and high integrity issues
- Improvements and additions to Ada to be included in Ada 200Y
- Use of the Ada Distributed Systems Annex
- Process and quality metrics
- Analysis, Testing, and Validation
- Standards
- Use of ASIS for new Ada tool development
- Mixed-language development
- Ada in XML environments
- Ada in .NET environments
- Quality Assurance
- Ada products evaluated per Common Criteria, Protection Profiles or Security Targets
- Ada & software engineering education
- Commercial Ada applications; what Ada means to the bottom-line
- Use of SPARK and Ravenscar profile for high reliability software
- Use of Real-Time CORBA
- Real-time networking/quality of service guarantees
- Fault tolerance and recovery
- Distributed system load balancing
- Static and dynamic code analysis
- Performance analysis
- Debugging complex systems
- Integrating COTS software components
- System Architecture & Design
- Information Assurance in the age of terrorism

How You Can Contribute

SIGAda 2003 is interested in receiving contributions in six major categories. Contributions from students are actively solicited.

- **Technical Articles** present significant results in research, practice, or education. These papers will be double-blind refereed and published in the Conference Proceedings. Articles will also be considered for poster presentation.
- **Extended Abstracts** discuss current work for which early submission of a full paper may be premature. If your abstract is accepted, you will be expected to produce a full paper, which will appear in the proceedings. Extended abstracts will be competitively reviewed. Clearly state the contribution of the work being described, its relationship with previous work by you and others (with bibliographic references), results to date, and future directions.
- **Experience Reports** present timely results on the application of Ada and related technologies to the design and implementation of applications such as the following: avionics, aerospace, automobile, command and control, consumer electronics, process control, transportation, trading systems, energy, medical systems, simulation, telecommunications, etc. Such reports will be selected on the basis of the interest of the experience presented to the community of Ada practitioners. You are invited to submit a 1-2 page description of the project and the key points of interest of project experiences. Descriptions will be published in the final program or proceedings, but a paper will not be required.
- **Workshops** are focused work sessions, which provide a forum for knowledgeable professionals to explore issues, exchange views, and perhaps produce a report on a particular subject. A list of planned workshops and requirements for participation will be published in the SIGAda 2003 Advance Program. Workshop proposals will be evaluated by the Program Committee and selected based on their applicability to the conference and potential for attracting participants. Proposals should state the problem or issue to be addressed, the coordinator(s), and criteria for participant selection.
- **Panel Sessions** gather a group of experts on a particular topic who present their views and then exchange views with each other and the audience. Panel proposals should be 1-2 pages in length, identifying the topic, coordinator, and potential panelists.
- **Tutorials** offer the flexibility to address a broad spectrum of topics relevant to Ada, and those enabling technologies which make the engineering of Ada applications more effective. Submissions will be evaluated based on relevance, suitability for presentation in tutorial format, presenter's expertise, and past performance. Tutorial proposals should include the expected level of experience of participants, an abstract or outline, the qualifications of the instructor(s), and the length of the tutorial.
- **Outstanding Student Paper Award.** A \$500 award plus free conference registration and lodging will be given to the student author(s) of the paper selected by the program committee as the outstanding student contribution to the conference.

Please submit **Technical Articles, Extended Abstracts, Experience Reports, Workshop proposals, and Panel Sessions** to the Program Chair, Ricky E. Sward <ricky.sward@usafa.edu>. Please submit **Tutorial proposals** to the Tutorials Chair, David Cook <david.cook@hill.af.mil>. Please submit questions on the conference to the Conference Chair, Robert C. Leif <rleif@rleif.com>.

Deadline for all submissions: 8 June 2003