



Association for
Computing Machinery

Call for Technical Contributions

Extended Submission Due Date: **May 31, 2008**

SIGAda Annual International Conference: Toward Safe, Secure, Reliable Software

October 26-30, 2008

University Place Hotel and Conference Center, Portland, Oregon, USA

<http://www.acm.org/sigada/conf/sigada2008/>
(ACM Approval Pending)

SUMMARY: Reliability, safety, and security are among the most critical requirements of contemporary software. The application of software engineering methods, tools, and languages all interrelate to affect how and whether these requirements are met.

Such software is in operation in many domains of application. Much has been accomplished in recent years, but much remains to be done. Our tools, methods, and languages must be continually refined; our management process must remain focused on the importance of reliability, safety, and security; our educational institutions must fully integrate these concerns into their curricula.

The conference will gather industrial and government experts, educators, software engineers, and researchers interested in developing, analyzing, and certifying reliable, safe, secure software. We are soliciting technical papers and experience reports with a focus on, or comparison with, Ada. We are especially interested in experience in integrating these concepts into the instructional process at all levels.

CONFERENCE LOCATION: Portland is the attractive, livable “City of Roses” in the Pacific Northwest. The weather in October is usually cool and often beautiful. University Place is a modern and reasonably-priced hotel located within walking distance of the central business district, the lively riverfront area, and the Portland State University campus.

HOW YOU CAN CONTRIBUTE: SIGAda 2008 solicits contributions in six major categories: Technical Articles, Extended Abstracts, Experience Reports, Workshops, Panel Sessions, and Tutorials. Contributions from students and faculty are actively solicited. Final acceptance will be contingent on a commitment to present the contribution at the Conference.

POSSIBLE TOPICS include but are not limited to:

- Transitioning to Ada 2005
- Educational challenges for developing reliable, safe, secure software
- Ada and SPARK in the classroom and student laboratory
- Language selection for highly reliable systems
- Mixed-language development
- Use of high reliability subsets or profiles such as MISRA C, Ravenscar, SPARK
- High-reliability standards and their issues
- Software process and quality metrics
- Analysis, testing, and validation
- Use of ASIS for new Ada tool development
- High-reliability development experience reports
- Static analysis of code
- Integrating COTS software components
- System Architecture & Design
- Information Assurance
- Ada products certified against Common Criteria / Common Evaluation Methodology

TECHNICAL ARTICLES present significant results in research, practice, or education. These papers will be double-blind refereed and published in the Conference Proceedings and in Ada Letters. Articles are typically 10-20 pages in length. Through the widely-consulted ACM Digital Library, the Proceedings will be accessible online, to university campuses and to ACM's 80,000 members.

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 double-blind refereed. In 5 pages or less, clearly state the work's contribution, 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. 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.

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.

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 Advance Program. Workshop proposals, up to 5 pages in length, will be selected by the Program Committee based on their applicability to the conference and potential for attracting participants.

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, and presenter's expertise. 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 (half-day or full-day). Tutorial presenters receive complimentary registration to the other tutorials and the conference.

HOW TO SUBMIT:

Send contributions by **May 31, 2008**, in Word, PDF, or text format as follows:

Technical Articles, Extended Abstracts, Experience Reports, and Panel Session Proposals: Program Chair, Leemon C. Baird III (leemon.baird@usafa.edu).

Workshop proposals: Workshops Chair, Bill Thomas (Bthomas@MITRE.org).

Tutorial proposals: Tutorials Chair, David A. Cook (Dcook@AEgisTG.Com).

OUTSTANDING STUDENT PAPER AWARD: An award will be given to the student author(s) of the paper selected by the program committee as the outstanding student contribution to the conference.

SPONSORS AND EXHIBITORS: Please contact S. Ron Oliver (SROliver@CSC.CalPoly.Edu) or Greg Gicca (gicca@adacore.com) for information about becoming a sponsor and/or exhibitor at SIGAda 2008.

IMPORTANT INFORMATION FOR NON-US SUBMITTERS:

General Visa Information: The sites <http://www.UnitedStatesVisas.gov> and <http://travel.state.gov> have information about obtaining a visa for those traveling to the United States. Both sites have links to websites for U.S. embassies and consulates worldwide. The embassy and consulate websites have helpful information about procedures, timelines, communities served, required documentation, and fees.

Letters from ACM: International registrants should be particularly aware and careful about visa requirements, and should plan travel well in advance. All visa inquiries must be handled by ACM Headquarters. Please send your request for a letter in support of a visa application to Ashley Cozzi (acozzi@acm.org), and include your name, mailing address, and fax number, as well as the name of the conference you are attending. Authors should also include the title of their contribution. Please note that ACM does not issue formal "letters of invitation" to any of its conferences.

Please submit any questions on the conference to the Conference Chair, Michael Feldman (mfeldman@gwu.edu).

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