

# ACM SIGAda FACT SHEET

## The ACM Special Interest Group on Ada Programming Language

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A powerful resource for the software community's ongoing understanding of the scientific, technical and organizational aspects of Ada language's use, standardization, environments, and implementations.

**URL:**<http://www.acm.org/sigada/>

### **Mission Statement**

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The ACM SIG on Ada deals with the Ada language and a broad span of issues related to its usage, teaching, standardization, and implementation. SIGAda members include practitioners, educators, researchers, and managers from a wide range of organizations in industry, academia, and government. Among the topics that SIGAda addresses are software engineering practice (with a particular focus on object tech.), real-time applications, high-integrity & safety-critical systems, high-integrity and safety-critical systems, software education, and large-scale system development. SIGAda explores these issues through an annual multi-track international conference, special-purpose Working Groups, active local chapters, and its quarterly Ada Letters publication.

### **Demographics**

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Design, implementation and maintenance of software systems. Software development, management or procurement of software-intensive systems.

### **Awards**

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#### ***Outstanding Ada Community Contribution***

Recognizes broad, lasting contribute to overall state of Ada Technology and usage

#### ***ACM SIGAda Distinguished Service***

Recognizes exceptional "volunteer" contribute to SIGAda activities and products

# From the Editor's Desk

*Alok Srivastava*

Welcome to this issue of Ada Letters. In this issue Randal Andress has described how the existing techniques to transfer of binary data between systems of different bit and byte order – Big-Endian (most significant first) vs. Little-Endian (least significant first) have been extended to develop a new, systematic method for coding Ada record component representations so that the same declaration may be used to define an input/output object of a communications link (or “flat” file) to achieve complete endian independence. Christoph Grein in his paper characterizes how to control the re-emergence of the pre-defined equality in Ada 95.

No issue would be complete without an update on reusable components from a regular Ada Letters contributor, Trudy Levine. This time in addition to reusable components, Trudy defined that many Ada constructs assist in the control of various anomalies of computer systems. In her paper on Control Intrusion she discusses two classes of anomalies that are shown to have similar characteristics. The first of these classes involves the mutual exclusion problem, for which there exists considerable literature within the Ada community.

This time Ada Letters also publishes the Ada Action Items starting with “Real Time AIs”. In beginning, first five Real Time AIs AI 00249 - Ravenscar profile for high-integrity systems AI 00297 - Timing events AI 00298 - Non-Preemptive Dispatching AI 00303 - Removal of library-level requirement for interrupt handler objects AI 00305 - New pragma and additional restriction identifiers for real-time systems, has been published which also includes considerable email exchanges among the developers so that the users could grasp the thoughts behind these improvements.

Of interest to all Ada users and enthusiasts is the new revision to the Ada language, Ada 2005. Inside you'll find information on SIGAda 2005 (November 13-17 in Atlanta) and Ada-Europe 2006 (5-9 June 2006 in Porto, Portugal). These conferences will be great opportunities to learn more about what is in the new revision of the Ada language, and how implementations of Ada 2005 are accomplished, as well as other research and industry uses of Ada.

Ada Letters would be a great place to submit articles on your experiences with the language revision, tips on how to do things with the new language features, as well as to describe success stories using Ada. We'll look forward to your submission. You can submit either a MS Word or Adobe PDF file (with 1” margins and no page numbers) to our technical editor:

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We look forward to hearing from you!

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## Editorial Policy (from Alok Srivastava, Managing Editor)

As the editor of Ada Letters, I'd like to thank you for your continued support of ACM SIGAda, and encourage you to submit articles for publication. In addition, if there is some way we can make Ada Letters more useful to you, please let me know. Note that Ada Letters is now on the web! See [http://www.acm.org/sigada/ada\\_letters/index.html](http://www.acm.org/sigada/ada_letters/index.html). The newest two issues are available only to SIGAda members. Older issues beginning March 2000 are available to all.

Now that Ada is standing on its own merits without the support of the DoD, lots of people and organizations have stepped up to provide new tools, mechanisms for compiler validation/assessment, and standards (especially ASIS). Ada Letters is a venue for you to share your successes and ideas with others in the Ada community—be sure to take advantage of it so that we can all benefit from each other's learning and experience.

Currently Ada Letters is published four times a year, with the exception of special issues. As some of the other ACM Special Interest Group periodicals will change, Ada Letters will also be transitioning from quarterly to a **tri-annual publication**. The revised tentative schedules during the transition period and submission deadlines are as follows:

Deadline	Issue	Deadline	Issue
December 1 <sup>st</sup> , 05	December 2005	February 1 <sup>st</sup> , 06	April 2006
June 1 <sup>st</sup> , 06	August 2006	October 1 <sup>st</sup> , 06	December 2006

Please send your article to Dr. Pat Rogers at [rogers@adacore.com](mailto:rogers@adacore.com)

## Guidelines for Authors

Letters, announcements and book reviews should be sent directly to the Managing Editor and will normally appear in the corresponding next issue.

Proposed articles are to be submitted to the Technical Editor. Any article will be considered for publication, provided that topic is of interest to the SIGAda membership. Previously published articles are welcome, provided the previous publisher or copyright holder grants permission. In particular, keeping with the theme of recent SIGAda conferences, we are particularly interested in submissions that demonstrate that “Ada Works.” For example, a description of how Ada helped you with a particular project or a description of how to solve a task in Ada are suitable.

Although Ada Letters is not a refereed publication, acceptance is subject to the review and discretion of the Technical Editor. In order to appear in a particular issue, articles must be submitted far enough in advance of the deadline to allow for review/edit cycles. Backlogs may result in an article's being delayed for two or more issues. Contact the Managing Editor for information on the current publishing queue.

Articles should be submitted electronically in one of the following formats: MS Word (preferred) Postscript, or Adobe Acrobat. All submissions must be formatted for US Letter paper (8.5" x 11") with one inch margins on each side (for a total print area of 6.5" x 9") with no page numbers, headers or footers. Full justification of text is preferred, with proportional font (preferably Times New Roman, or equivalent) of no less than 10 points. Code insertions should be presented in a non-proportional font such as Courier.

The title should be centered, followed by author information (also centered). The author's name, organization name and address, telephone number, and e-mail address should be given. For previously published articles, please give an introductory statement (in a distinctive font) or a footnote on the first page identifying the previous publication. ACM is improving member services by creating an electronic library of all of its publications. Read the following for how this affects your submissions.

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### **Back Issues**

Back issues of Ada Letters can be ordered at the price of \$6.00 per issue for ACM or SIGAda members; and \$9.00 per issue for non-ACM members. Information on availability, contact the ACM Order Department at 1-800-342-6626 or 410-528-4261. Checks and credit cards only are accepted and payment must be enclosed with the order. Specify volume and issue number as well as date of publication. Orders must be sent to:

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