

SIGAda Annual Report

July 1, 2006 - June 30, 2007

July 31, 2007



Each SIG Chair is required to submit an annual report a month after ACM's fiscal year closes on June 30. This report summarizes the highlights of the SIG's activities between July 1, 2006 and June 30, 2007. This year ACM limits the content of the annual report to five topics:

1. Awards that were given out
2. Significant papers on new areas that were published in proceedings
3. Significant programs that provided a springboard for further technical efforts
4. Innovative programs which provide service to some part of your technical community; and
5. A very brief summary for the key issues that the membership of that SIG will have to deal with in the next 2-3 years.

With the assistance of the SIGAda Executive Committee, I have put together and submitted the following report. I welcome comments from all SIGAda members.

SIGAda Awards

Started in 1994, the ACM SIGAda Awards recognize individuals and organizations that have made outstanding contributions to the Ada community and to SIGAda. The two categories of awards are:

1. Outstanding Ada Community Contribution Award for broad, lasting contributions to Ada technology & usage.
2. ACM SIGAda Distinguished Service Award for exceptional contributions to SIGAda activities & products.

This year the Outstanding Ada Community Contribution Award was awarded to two individuals:

- Grady Booch
- Ben Brosgol

This year the ACM SIGAda Distinguished Service Award was awarded to

- Michael Berman

SIGAda also makes the Outstanding Student Paper Award at its annual conference. At SIGAda 2006 this award was presented to Bechir Zalila for the paper "An Improved IDL Compiler for Optimizing CORBA Applications". Jérôme Hugues, and Laurent Pautet coauthored this paper.

Significant Papers published in proceedings

This year's conference proceedings included a significant increase in the number of papers on the use of Ada in education. This increase reflects the 40% membership increase in AdaCore's GNAT Academic Program (GAP). Currently 140 educational organizations in 25 countries participate.

"Catch that Speeding Turtle: Latching onto Fun Graphics in CS1" by Tanya Markow, Eugene Ressler, and Jean Blair of the United States Military Academy. The paper shows that Ada is competitive with other languages in teaching novice programmers.

"Developing Safety Critical Software for an Unmanned Aerial Vehicle Situational Awareness Too" by Ricky E. Sward and Mark Gerken of the US Air Force Academy. It demonstrates that the Ada language can be used by students to development formally verified safety critical software.

Significant Programs that provided a springboard for further technical efforts

A formal liaison exists between SIGAda and WG9. ISO/IEC JTC1/SC22 WG9 is that body of international representatives responsible for the maintenance and evolution of the Ada International Standard. The National Bodies represented on WG9 are Belgium, Canada, France, Germany, Italy, Japan, Switzerland, the United Kingdom, and the United States.

In March 2007 the ISO (the International Organization for Standardization) in Geneva, Switzerland announced the formal completion of the process to revise the Ada 95 language, with the publication of the Ada 2005 standard — officially named ISO/IEC 8652:1995/Amd 1:2007. This announcement culminates a collaborative international effort under ISO's Ada Working Group (WG9) to enhance the 1995 version of the Ada language.

Innovative Programs which provide service to some part of our technical community

Since 1994 SIGAda has conducted an "Ada Awareness Initiative". Its centerpiece has been our SIGAda professional booth display unit in exhibition halls at important software engineering conferences. This lets folks know that Ada is very much alive and a sound part of any software engineering effort having real-time, high integrity, high-assurance, and highly distributed requirements. This year we purchased a new display booth which was exhibited at two conferences. Via this exhibiting, SIGAda sustains Ada visibility ("name recognition"), provides various Ada-advocacy materials and makes available Ada experts (our booth staff volunteers) who can intelligently answer questions, provide pointers and help, and debunk the misinformation about Ada that many attendees at these shows have. This program continues to be extremely successful and viewed as a highly important thrust by the SIGAda membership. SIGAda graciously acknowledges and thanks the Ada Resource Association (ARA), a consortium of Ada vendors, for their financial support of SIGAda's Ada Awareness Initiative and our booth activities.

Summary of key issues to deal with in the next 2-3 years

Although our retention rate is higher than most ACM SIGs, our membership numbers continue to decline. While we saw another increase in young people presenting papers at our 2006 conference, the "graying" of SIGAda is a continuing problem for the vitality of the organization. We need to find some way to encourage these people to participate in the SIGAda organization.

While gender imbalances are common in the computing disciplines, SIGAda seems to have a greater imbalance than other areas.

We need to increase the proportion of SIGAda members who actively participate in our conference and journal.

John McCormick
Chair ACM SIGAda