

SIGAda

The ACM Special Interest Group on Ada

ACM

Association for Computing Machinery

2 Penn Plaza, Suite 701
New York, NY 10121-0701
Phone: +1 (212) 869-7440
Fax: +1 (212) 302-5826

Reply To:

John W. McCormick
Chair ACM SIGAda
University of Northern Iowa
Cedar Falls, IA 50614-0507
Phone: +1 (319) 273-6056
FAX: +1 (319) 273-7123
Email: mccormick@cs.uni.edu



SIGAda Annual Report July 1, 2005 - June 30, 2006

July 31, 2006

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, 2005 and June 30, 2006. 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:

Matthew Heaney
Pascal Leroy

This year the ACM SIGAda Distinguished Service Award was awarded to two individuals

Eugene Bingue
Rush Kester

SIGAda also makes the Outstanding Student Paper Award at its annual conference. At SIGAda 2005 this award was presented to Knut Pedersen for his paper titled "AspectAda - Aspect Oriented Programming for Ada 95".

Significant Papers published in proceedings

"Modeling SPARK Systems with UML" by Xavier Sautejeau. UML is becoming more and more important in the design and development of software systems (and systems in general), and SPARK is one of the major success stories of Ada in the past few years.

"Orchestrating Shots for the National Ignition Facility" by David G. Mathisen and Robert W. Carey. It demonstrates that the Ada language can definitely be used in the development of a hard real-time critical application.

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 Canada, France, Germany, Italy, Japan, Switzerland, the United Kingdom, and the United States.

In June 2006 WG9 completed the technical work on the new Ada 2005 standard and its steady progress towards formal approval by ISO, the International Organization for Standardization. The proposed amendment that creates the Ada 2005 standard has since been submitted to formal balloting at the next ISO level, the Standards Committee SC 22, which deals with all Programming Languages. The formal ballot at SC 22 level is now well underway and is due to complete by September 1st, 2006. After approval at SC level, the proposed amendment needs to pass a final balloting stage at the highest level of authority within ISO, the Joint Technical Committee JTC 1, which is in charge of the whole Information Technology sector. The final balloting stage at JTC 1 level will commence straight after completion of the SC 22 ballot and is expected to complete in November 2006.

In conjunction with our new role as Category C Liaison with WG9, SIGAda has initiated a program to manage Ada Application Program Interfaces (APIs). Management of APIs could be an important step towards the eventual standardization of APIs through ISO/IEC JTC 1/SC22 WG9. The intent is that Ada-Europe, SIGAda, and WG9 can work together to provide a valuable service to the Ada community for managing Ada bindings to APIs. The revised plan is significantly improved and available on line from the SIGAda Home Page for the API Working

Group at <http://www.acm.org/sigada/wg/apiwg/>. Mr. Geoff Smith of IBM has volunteered to lead this effort. APIWG was chartered as part of this plan.

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 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 has been 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 among the highest of all ACM SIGs, our membership numbers continue to decline. While we saw more young people presenting papers at our conference this year, the "graying" of SIGAda is a potential 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