

# **SIGAda 2006**

## **International Conference on Software Development for Safety, Security, and High Reliability Systems**

12-16 November 2006, Albuquerque, NM, USA

Sponsored by ACM SIGAda

<http://www.acm.org/sigada/conf/sigada2006>

Constructing high reliability 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 safety, security and high reliability systems and the issues related to their development. Topics such as applied software engineering principles, conforming to specific safety or security standards, testing philosophies, programming language selection, etc. will be discussed. The 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 will be presented. Contributions were received from among the following areas:

- Safety, security and high integrity development issues
- Language selection for a high reliability system: Ada, C, C++, Java, or others
- Use of high reliability subsets or dialects: Java HIP, MISRA C, Ravenscar, SPARK, etc.
- High reliability standards and their issues: DO-178B, EIC 61508, FDA, SAE, CC, EAL, etc.
- Process and quality metrics
- Analysis, Testing, and Validation
- Use of ASIS for new Ada tool development
- Mixed-language development
- Quality Assurance
- Performance analysis
- High reliability software engineering education
- High reliability development experience reports
- Real-time networking/quality of service guarantees
- Fault tolerance and recovery
- Distributed system load balancing
- Static and dynamic code analysis
- Debugging complex systems
- Integrating COTS software components
- System Architecture & Design
- Information Assurance in the age of terrorism
- Improvements and additions to the Ada language in Ada 2005
- Ada products evaluated per Common Criteria, Protection Profiles or Security Targets

The keynote address will be given by Judith Klein of Lockheed Martin. Judith will present the "Use of Ada in Lockheed Martin for Air Traffic Management and Beyond". Judith Klein is a certified systems architect at Lockheed Martin Transportation and Security Solutions. She has 28 years' experience developing distributed, real-time systems of various sizes in different domains; the last 15 years have been focused on air traffic control.

The SIGAda 2006 Program Committee is:

Program Chair,	Leemon C. Baird III	leemon.baird@usafa.af.mil
Tutorials Chair,	David Cook	dcook@aegistg.com
Conference Co-Chairs,	Greg Gicca	ggicca@tampabay.rr.com and
	Ricky Sward	rsward@mitre.org

See the SIGAda 2006 Home Page for further details on the conference:

<http://www.acm.org/sigada/conf/sigada2006>



# *SIGAda 2006*

The Annual International Conference on the  
Ada Programming Language



**Albuquerque, New Mexico, USA**  
**12-16 November 2006**

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