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FEATURED SPEAKERS

**A Decade of Program Verification at Microsoft**
TOM BALL
Microsoft Research

**From Ada 9X to Spaceport America: Going Where No One Has Gone Before**
CHRISTINE ANDERSON
Spaceport America

**AADL and Model-Based Engineering**
PETER FEILER
Software Engineering Institute/ Carnegie Mellon University

PRE-CONFERENCE TUTORIALS / October 18–19

Saturday Full Day / 9:00 AM–5:30 PM / SAT, FD_1

Saturday Full Day / 9:00 AM–5:30 PM / SAT, FD_2
Peter Chapin (Vermont Technical College) and John W. McCormick (University of Northern Iowa) / Introduction to SPARK 2014

Sunday Morning / 9:00 AM–12:30 PM / SUN, AM_1
Ben Brosiol (AdaCore) / High-Intensity Object-Oriented Programming with Ada 2012

Sunday Afternoon / 2:00 PM–5:30 PM / SUN, PM_1
Jérôme Hugues (Institute for Space and Aeronautics Engineering) and Frank Singhaff (Université de Bretagne Occidentale) / ADA202, an Architecture Description Language for the Analysis and Generation of Embedded Systems

Sunday Afternoon / 2:00 PM–5:30 PM / SUN, PM_2
Niko Matsakis (Mozilla Research) / Rust—Zero-Cost Safety

TECHNICAL PROGRAM / October 20–21

MONDAY
9:00 AM–10:30 AM
Greet & Gossip
SIGAda and Conference Officers

Keynote Address
Christine Anderson (Spaceport America)
From Ada SX to Spaceport America: Going Where No One Has Gone Before
10:30 AM–11:00 AM Break / Exhibits

11:00 AM–12:30 PM
Enhancing and Evolving Embedded Systems Languages for Safety
J. Barnes and T. Taft
Ada83 to Ada2012—Lessons Learned Over 30 Years of Language Design
D. Crocker
Can C++ Be Made as Safe as SPARK?
T. Szabo

mbed®—Extensible Languages for Embedded Software Development

Sponsor Presentation
12:30 PM–2:00 PM Break / Exhibits

2:00 PM–3:30 PM
Model-Based Engineering for the Multicore Era (II)
T. Tafj
Safe Parallel Programming in Ada with Language Extensions
R. Boccini
Spot: A Programming Language for Verified Flight Software
N. Matsakis

The Rust Language
Sponsor Presentation
3:30 PM–4:00 PM Break / Exhibits

4:00 PM–5:30 PM
Safe Programming Languages for the Multicore Era (I)
Panel: Finding Safety in Numbers—New Languages for Safe Multicore Programming and Modeling
R. Boccioni, N. Matsakis, T. Tafj, B. Larson, E. Seidewitz

5:30 PM–6:00 PM
HILT 2014 Conference Wrap-up
SIGAda and Conference Officers
For more information and updates, visit www.sigada.org/conf/hilt2014

TUESDAY
8:30 AM–10:00 AM
Announcements
SIGAda Awards
Ricky E. Sward, Past SIGAda Chair

Keynote Address
Tim Ball (Microsoft Research) / A Decade of Program Verification at Microsoft
10:00 AM–10:30 AM Break / Exhibits

10:30 AM–12:30 PM
Behavioral Modeling and Code Generation
B. Larson
BLESS Assertion 00 Behavioral Interface Specification Language
E. Seidewitz
UML with Meaning: Executable Modeling in Foundational UML and the AADL Action Language
Panel: Executable and Behavioral Modeling Languages
E. Ahmad, J. Hugues, B. Larson, E. Seidewitz

7:00 PM–10:00 PM
Dinner and Social Event

CONFERENCE TEAM

Tuesday Full Day Conference / Chair: Academic Community Liaison
Michael B. Feldman, George Washington University (Ret.)
mfeldman@yale.edu

Program Chair / Proceedings Chair
Tucker Taft, AdaCore
rtaft@adacore.com

Treasurer
Jeff Roleing, Software Engineering Institute
jroleing@sei.cmu.edu

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University of Northern Iowa
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clybro@idacorp.org

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tapani@acm.org

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Logo Designer
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CONFERENCE (FULL)
Member of ACM, SIGAda, or cooperating organization.
$600 early / $750 after Oct. 11
Full-time Student: $50

CONFERENCE (ONE DAY)
Member of ACM, SIGAda, or cooperating organization.
$325 early / $400 after Oct. 11
Non-members:
$475 early / $500 after Oct. 11
Full-time Student: $25

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VENUE / HOTEL

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REGISTRATION FEES


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SPLASH OPENING KEYNOTE ADDRESS / October 22

8:30 AM–10:00 AM
HILT attendees are invited to attend the Wednesday morning SPLASH opening keynote address by Gary McGraw, CTO of Cigital, Inc. and author of Software Security
PRE-CONFERENCE TUTORIALS / October 18–19

Saturday Full Day / 9:00 AM–5:30 PM / SAT_FDL

Sunday Full Day / 9:00 AM–5:30 PM / SAT_FD_L
Peter Chapin (Vermont Technical College) and John W. McCormick (University of Northern Iowa) / Introduction to SPARK 2014

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Sunday Afternoon / 2:00–5:30 PM / SUN_PM_2
Niko Matsakis (Mozilla Research) / Rust—Zero-Cost Safety

TECHNICAL PROGRAM / October 20–21

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10:30 AM–11:00 AM Break / Exhibits

11:00 AM–12:30 PM Enhancing and Evolving Embedded Systems Languages for Safety
J. Barnes and T. Taft / Ada83 to Ada2012—Lessons Learned Over 30 Years of Language Design
D. Crocker / Can C++ Be Made as Safe as SPARK?
T. Szabo / mbedd-x—Extensible Languages for Embedded Software Development
Sponsor Presentation
12:30 PM–2:00 PM Buffet Lunch / Exhibits

TUESDAY
8:30 AM–10:00 AM Announcements SIGAda Awards
Ricky E. Sward, Past SIGAda Chair / Keynote Address
Tom Ball (Microsoft Research) / A Decade of Program Verification at Microsoft
10:00 AM–11:30 AM Break / Exhibits
10:30 AM–12:30 PM Applying Formal Methods
W. Rathe / A Framework for Model Checking UML Network Programs with Java Pathfinder
A. H. Bugge / Specification of Generic APIs—or: Why Algebraic May Be Better than Pre/Post
Panel: Practical Use of Assertions and Formal Methods in Industry
J. Ahmed / Formal Methods for Commercial Applications; A. H. Bugge, Algebraic API Specifications; R. A. Reyes, Knowledge Base for Use of Assertions
12:30 PM–2:00 PM Break / Exhibits
2:00 PM–3:30 PM Safe Programming Languages for the Multicore Era (I)
T. Taft / Safe Parallel Programming in Ada with Language Extensions
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Chair / Local Arrangements Conference Chair / Academic Community Liaison
Michael B. Feldman, George Washington University (Ret.) / jlboleng@seicmu.edu
Program Chair / Proceedings Chair
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Treasurer
Jeff Rolo, Software Engineering Institute / jtrolo@sei.cmu.edu
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Webmaster
Clyde Roby, Institute for Defense Analyses / clyde@ida.org
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Greg Gicca, Veroceil / gicca@veroceil.com
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Tapanj S. of ACM, SIGAda, or cooperating organization.
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$250 early / $300 after Oct. 11
Non-members:
$900 early / $950 after Oct. 11
Full-time Student: $150

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Non-members:
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REGISTRATION FEES
Join SIGAda for just $25 and take advantage of the reduced member rates.

WORKSHOPS / BIRDS-OF-A-FEATHER
To propose a focused workshop or informal Birds-of-a-Feather session related to the conference theme, please contact the Workshops Chair, John W. McCormick, mccormick@cs.uni.edu

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