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HILT 2013 will provide a forum for experts from academia/research, industry, and government to present their latest findings in designing, implementing, and using language technology for high integrity software.


**FEATURED SPEAKERS**

**Model Checking: Past, Present, and Future**
EDMUND M. CLARKE
Carnegie Mellon University
Electrical and Computer Engineering (ECE)

**Formal Methods: An Industrial Perspective**
JEANNETTE WING
Microsoft Research

**Building Confidence in System Behavior**
JOHN GOODENOUGH
Carnegie Mellon University
Software Engineering Institute (SEI)

**Up and Out: Scaling Formal Analysis Using Model-Based Engineering**
MICHAEL WHALEN
University of Minnesota

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**PRE-CONFERENCE TUTORIALS / November 10–11**

**SUNDAY**
- Afternoon / 2:00 PM–5:30 PM
  - Object-Oriented Programming in Ada 2012 Part 1
  - Tucker Taft / AdaCore

**MONDAY**
- Afternoon / 2:00 PM–5:30 PM
  - Practical Specification and Verification with CodeContracts
  - Francesco Legaziano / Microsoft Research
  - Reputation Management
  - Suresh Chari / Microsoft Research

**TECHNICAL PROGRAM / November 12–14**

**WEDNESDAY**
- Afternoon / 2:00 PM–5:30 PM
  - Invited Talk
    - Michael Whalen, University of Minnesota
    - “Up and Out: Scaling Formal Analysis Using Model-Based Engineering” (Industrial presentation)
  - Model-Based Verification Tools
    - D. Ward
    - “An Approach to Integration of Complex Systems: The SAVI Virtual Integration Process (industrial presentation)”
  - Software and Systems Security
    - M. Bebb
    - “Using Autocode Generators for Analytics Systems and Maintaining Compliance to DO-178 and DO-331” (industrial presentation)
  - Keynote Address
    - John Goodenough, CMU/SEI
    - “Optimizing Development and Verification Effort with SPARK 2014”
  - Formal Verification Toolsets
    - J. Hendrix
    - “SAIL: The Software Analysis Workbench”

**THURSDAY**
- Afternoon / 2:00 PM–5:30 PM
  - Invited Talk
    - John Goodenough, CMU/SEI
    - “Towards the Formalization of SPARK 2014 Semantics with Explicit Run-time Checks Using Coq”
  - Industrial Presentation
    - Z. Zhang
    - “Towards the Formalization of SPARK 2014 Semantics with Explicit Run-time Checks Using Coq”
  - Panel on Approaches to Safety and Security
    - D. Ward
    - “Model-Based Integration and Code Generation”
  - Keynote Address
    - John Goodenough, CMU/SEI
    - “Building Confidence in System Behavior”

**CONFERENCE (FULL)**
- Member of ACM, SIGAda, or cooperating organization
- $575 early / $725 after Oct. 21
- Non-members
  - $875 early / $255 after Oct. 21
  - Full-time student: $55

**CONFERENCE (ONE DAY)**
- Member of ACM, SIGAda, or cooperating organization
- $235 early / $325 after Oct. 21
- Non-members
  - $325 early / $375 after Oct. 21
  - Full-time student: $25

**TUTORIAL (FULL DAY)**
- Member of ACM, SIGAda, or cooperating organization
- $175 early / $185 after Oct. 21
- Non-members
  - $210 early / $235 after Oct. 21
  - Full-time student: $15

**TUTORIAL (HALF DAY)**
- Member of ACM, SIGAda, or cooperating organization
- $105 early / $115 after Oct. 21
- Non-members
  - $125 early / $135 after Oct. 21
  - Full-time student: $10

**CONFERENCE TEAM**
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  - Past Chair
    - Ricky E. Sward, The MITRE Corporation / rsward@mitre.org
- ACM Ada Letters Editor
  - Alok Srivastava, TASC Inc. / alok.srivastava@tasc.com

**VENUE / HOTEL**
- HILT 2013 will be held at the Wyndham Pittsburgh University Center, www.tinyurl.com/HILT2013-hotel.
- The Wyndham Pittsburgh University Center has reserved a block of rooms for the HILT 2013 conference. The conference rate is $119 for single, double, triple, or quadruple occupancy rooms. This includes complimentary wireless Internet in all the guest rooms and free parking for guests. State and local taxes will be added per night. All reservations must be guaranteed by credit card. Please also visit www.sigada.org/conf/hilt2013/hotel-rates.html and www.tinyurl.com/sig_volunteer_info/whyhotel.htm for additional details. For directions from Pittsburgh International Airport (PIIT) as well as information about transportation to and from the airport via Super Shuttle, Taxi Services, and Bus Service, please visit www.pitairport.com, or www.pitairport.com/public_transportation for public transport options.

**SPONSORS / EXHIBITORS**
- HILT 2013 will include vendor participation, featuring presentations on their products and services during main sessions. For specific information, please contact the Exhibits Chair, Greg Giaca, gica@verocel.com.

**REGISTRATION FEES**
- As in past years, SIGAda is offering grants to educators to attend the conference. Grants cover the registration and tutorial fees; members of the GNAT Academic Program may be eligible for travel funds from AdaCore. Apply by e-mail, no later than October 14, 2013. Grant program details are available from the conference website or Professor Michael B. Feldman, mfeldman@gwu.edu.

**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.
**PRE-CONFERENCE TUTORIALS / November 10–11**

**SUNDAY**

- 9:00 AM–11:00 AM: Tutorial: Parallel Programming
- 11:30 AM–1:00 PM: Tutorial: Model Checking
- 1:30 PM–3:00 PM: Tutorial: Formal Verification Toolsets

**MONDAY**

- 9:00 AM–11:00 AM: Tutorial: SPARK Verifiable Subset of Ada, Parallel Programming to the End
- 11:30 AM–1:00 PM: Tutorial: Architecture-Level Design Languages and Compositional Verification
- 1:30 PM–3:00 PM: Tutorial: Service-Oriented Architecture (SOA) Concepts and Implementations

**TECHNICAL PROGRAM / November 12–14**

**WEDNESDAY**

- 9:00 AM–10:30 AM: Tutorials: Parallel Programming, Optimization and Verification Effort with SPARK 2014
- 11:00 AM–12:30 PM: Tutorial: Architecture-Level Design Languages and Compositional Verification

**TUESDAY**

- 9:00 AM–10:30 AM: Tutorials: SPARK Verifiable Subset of Ada, Parallel Programming to the End
- 11:00 AM–12:30 PM: Tutorial: Service-Oriented Architecture (SOA) Concepts and Implementations

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- **Tutor (Half-Day)**
  - Member of ACM, SIGAda, or cooperating organization: $310 early / $350 after Oct. 21
  - $320 after Oct. 21

- **Tutor (Full-Day)**
  - Member of ACM, SIGAda, or cooperating organization: $325 early / $375 after Oct. 21
  - $335 after Oct. 21
  - $475 after Oct. 21

**CONFERENCE TEAM**

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- Ted T Cox, TMIST / tcox@tmist.org
- Jimmy Ackley / jackley@tmist.org

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