



ADA UK CONFERENCE

April 25th, 2013
Austin Court, Birmingham

A benchmark for safety, security and reliability – the new updated Ada 2012 language

In an era when software impacts on almost every part of our lives, the need for software that is both safe and secure has never been greater or more urgent. With decades of success in industrial sectors including avionics, aerospace and defence, Ada is generating new interest in domains such as automotive, medical and financial systems, where the cost of software errors can range from lost livelihoods to lost lives. Ada 2012 is the next generation of the world’s premier programming language for engineering safe, secure and reliable software.

The most important enhancements in Ada 2012 are directly related to program “correctness”, namely the introduction of more powerful assertion mechanisms (predicates) into the language: pre- and post-conditions for subprograms, type invariants, and subtype predicates. These are mechanisms that encourage the programmer to better specify the intent of the code they write, and allow the run-time system to verify that this intent is actually achieved. These “programming by contract” features are also beneficial when utilising static analysis tools.

The one-day Ada Conference UK will feature a **half-day tutorial** on the new capabilities introduced in this latest version. Presented in the morning by **Tucker S. Taft**, language expert and member of the Ada Rapporteur Group (ARG), this tutorial will introduce these new features to programmers familiar with either Ada or other systems programming languages such as C, C++ or Java. A member of the Def Stan Authoring Team will also give an overview on the planned revision of Def Stan 00-56, introducing new concepts and requirements. The afternoon session will offer a range of talks from industry and technical experts as well as a selection of vendor talks from the Ada ecosystem.

To attend this key event in the Ada calendar, at a charge of £180, please complete the registration slip below.

Event operated by CSR, in cooperation with
the Safety-Critical Systems Club:
www.scsc.org.uk

Event lead sponsor and advocate:
www.adacore.com



I would like to attend the Ada UK Conference, 25th April, 2013 at a cost of £180

Name..... Organisation.....

Address.....

Telephone Email Vegetarian: Yes/No

To pay by cheque, please enclose a cheque for £180, payable to: Newcastle University (CSR)

To pay by credit card, please complete the following: MasterCard Visa American Express

Name on card Card No

Amount to be charged Expiry date Security No

Cardholder’s Address

Please return this registration slip with your payment to:

Joan Atkinson, Centre for Software Reliability, Claremont Tower, Newcastle University, Newcastle upon Tyne, NE1 7RU
Phone: 0191 221 2222 Fax: 0191 222 7995 Email: joan.atkinson@newcastle.ac.uk

Ada Conference UK

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25th April 2013

Provisional PROGRAMME

08.30 Coffee and Registration

09.00 **Ada 2012 Tutorial:** *Tucker Taft, SofCheck, Inc.*
(mid-morning break 10.15 to 10.45)

12.00 *Lunch*

13.15 **Keynote Speaker:** *John C. Knight, University of Virginia, Charlottesville*
"Ada Types - Are They Sufficient?"

14.00 *Technical Track*

Vendor Track

<i>Speaker from Def Stan Authoring Team Proposed Revision to Def Stan 00-56</i>	Atego
<i>Jeff Cousins, BAE Systems Ada 2005 in Practice</i>	Altran
	AdaCore

15.00 *Break*

15.30 *Technical Track*

Vendor Track

<i>Mark Richardson, LDRA From the model to the target to certification</i>	Abstract Solutions
<i>To be confirmed TBA</i>	Wind River
	VectorCast

16.30 **Closing Keynote Speaker:** *Robert Dewar, New York University and AdaCore*
"I'm as Mad as Hell, and I'm Not Going To Take This Anymore!"

17.15 Close

The event website at www.ada-uk-conference.co.uk will provide further details as they become available, and will offer suggestions for hotel accommodation near Austin Court.