



16th International Conference on Reliable Software
Technologies -
Ada-Europe 2011

Ada Conference UK
2011

John McIntyre Conference Centre, Edinburgh, UK
20 - 24 June 2011



<http://www.ada-europe.org/conference2011>



The **Ada Connection 2011** sees a union of two Ada events that have both been very successful in their own right. The **Ada-Europe** series of conferences has become established as an international forum for providers, practitioners and researchers in all aspects of reliable software technologies. The **Ada Conference UK** has been running in its current form since 2006 as a series of biennial one-day events, to highlight the increased relevance of Ada in safety- and security-critical systems. By combining these events, the **Ada Connection** will provide a unique opportunity for interaction and collaboration between academics and industrial practitioners.

Edinburgh is a first-class city and conference venue. The John McIntyre Conference Centre is located within the University of Edinburgh campus, approximately 20 minutes walk from the city centre. The Conference Centre is adjacent to Holyrood Park, whose centrepiece, Arthur's Seat, offers a half-hour 'climb' from which excellent views can be gained of the city of Edinburgh and beyond.

Conference Programme at a glance

Monday	Tuesday		Wednesday		Thursday		Friday
	Opening/Welcome		Ada 2012 update		GAP update, Educators' session, AdaWay Prize		
<i>Tutorials</i>	Keynote - Peter Ladkin		Keynote - Pippa Moore		Keynote - Jeff O'Leary		<i>Tutorials</i>
<i>Tutorials</i>	Technical Papers: Multi-Core		Industrial Presentations: Modelling and Complexity		Panel: DO178C and Object-Orientation for Critical Systems		<i>Tutorials</i>
<i>Tutorials</i>	Technical Papers: Verification	Sponsor talks	Industrial Presentations: Real-time and Longevity	Exhibitor talks	Technical Papers: Architecture and Modelling	Industrial Presentations: Innovation and New Markets	<i>Tutorials</i>
<i>Tutorials</i>	Panel: Programming Languages Meet Multi-Core	Sponsor & Exhibitor talks	Industrial Presentations: Transitioning and Debugging	Exhibitor talks	Technical Papers: Education and Mixed Criticality		<i>Tutorials</i>

The conference programme includes tutorials, technical papers, industrial papers, vendor presentations and a comprehensive vendor exhibition, together with two panel discussion sessions and three keynote talks. These are summarised below, but for full details and registration see the conference website:

<http://www.ada-europe.org/conference2011>

<p>Tutorials</p> <p>Six half-day tutorials are presented on Monday, and three full-day tutorials on Friday.</p> <p style="text-align: center;">Half Day Tutorials</p> <p>T1: Experimenting with ParaSail Parallel Specification and Implementation Language by <i>S. Tucker Taft, SofCheck, Inc (USA)</i></p> <p>T2: Designing and Checking Coding Standards for Ada by <i>Jean-Pierre Rosen, Adalog (France)</i></p> <p>T3: Programming Distributed Systems with YAMIA by <i>Maciej Sobczak, Inspirel (Poland)</i></p> <p>T4: Why and How to Measure Non-Functional Properties On Target by <i>Ian Broster, Rapita Systems Ltd (UK)</i></p> <p>T5: Revamping the Software Technical Review Process by <i>William Bail, The MITRE Corporation (USA)</i></p> <p>T6: Use of Object-Oriented Technologies in High-Reliability Systems by <i>Jean-Pierre Rosen, Adalog (France)</i></p> <p style="text-align: center;">Full Day Tutorials</p> <p>T7: MAST: Predicting Response Times in Event-Driven Real-Time Systems by <i>Michael G. Harbour, Universidad de Cantabria (Spain)</i></p> <p>T8: SPARK: The Libre Language and Toolset for High-Assurance Software by <i>Roderick Chapman, Altran Praxis (UK)</i></p> <p>T9: Distributed Programming Techniques in Ada by <i>Thomas Quinot, AdaCore (France)</i></p> <p>For full tutorial details, please see the conference web pages.</p>	<p style="text-align: center;">Keynotes</p> <p>Three keynote talks are provided by eminent speakers: Peter Bernard Ladkin (Causalis Ltd) on the <i>Future of Software Safety Standards</i>, Pippa Moore (UK CAA) on the topic of <i>Hippocrates and DO-178B</i>, and Jeff O’Leary (USA FAA) on <i>Assuring Software Reliability While Using Web Services and Commercial Products</i>.</p> <p style="text-align: center;">Panels</p> <p>Panel 1: Programming Languages Meet Multi-Core</p> <p>The advent of multi-core is shaking the very foundations of programming languages for concurrency, resource sharing, synchronisation, etc. We are asking some language designers to discuss solutions to this challenge. Confirmed participants include: Erhard Plödereeder (moderator - University of Stuttgart), Alan Burns (University of York), Tucker Taft (SofCheck, Inc), Kevin Hammond (University of St Andrews).</p> <p>Panel 2: DO178C and Object-Orientation for Critical Systems</p> <p>The high-integrity systems industry faces the challenge of reaping the benefit of object-orientation in their rigid and demanding development process. Domain experts will debate pros and cons, risks and opportunities, and ways to introduce elements of object-orientation into safety-critical system development. Confirmed participants include: Cyrille Comar (AdaCore), Jean-Pierre Rosen (Adalog), Dewi Daniels (Verocel).</p> <p style="text-align: center;">Vendor Exhibition</p> <p>The exhibition will open on Tuesday morning, and run until the last session on Wednesday. It will take place in the conference venue; coffee breaks and lunch on Wednesday will be served in the exhibition space.</p> <p>Companies who have already booked their exhibition space at the conference include, in alphabetical order: AdaCore, Altran Praxis, Causalis Limited, Ellidiss Software, Green Hills Software, LDRA, Objektum Solutions, Rapita Systems, Resource Engineering, TTE Systems, Vector Software and Wind River.</p>
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Social Programme

Welcome Reception - Tuesday 21st June

The Ada Connection offers a Welcome Reception with a difference, combining an informal opportunity to meet our exhibitors with an educational tasting experience. Each exhibition stand will have a different bottle of single malt Scotch whisky available, specially chosen to span the aroma and flavour spectrum; you are invited to visit and sample an appropriate number of these fine and rare “malts”. Wine and soft drinks will, of course, also be available.

Conference Banquet Dinner - Wednesday 22nd June

The Ada Connection Gala Dinner will be held in true Celtic style at **The Signet Library** situated on the Royal Mile, considered to be one of the finest examples of Georgian architecture in the country. Drinks will be served in the Lower Library, which is a working law library by day, enjoying an outlook onto Parliament Square and the Royal Mile. Once settled in, we will enjoy a pre-dinner presentation by **Professor Les Hatton** - a noted contributor to safer software engineering. Dinner will then be served in the Upper Library, with magnificent architectural features, including a magnificent stained glass window celebrating Queen Victoria’s Jubilee.