TECH DAYS

EXPO • SEMINARS • WORKSHOPS

ADELAIDE
09 -10 MARCH
2016

Dedicated Systems Australia, in conjunction with its suppliers and technology partners, is pleased to announce its inaugural "Tech Days" event scheduled for 9th and 10th March.

Subject Matter Experts will be on hand to answer questions, present seminars and deliver workshops in the following focus areas:

- **FPGA and Reconfigurable Computing**
- **Geospatial, Big Data and Internet of Things**
- **Reliability, Safety and Security**

'How do Multicore Devices Effect Security and What is Security Anyway?'

Presenter: Alex Wilson (Wind River)

This briefing covers software aspects of security, from power up to data transmission, focusing on how Confidentiality, Integrity, and Availability can be implemented to defend modern software systems from attack.

The briefing will also look at how multicore devices might affect the systems security of devices and what steps could be taken to mitigate these new risks.

'The IIOT Evolution'

Presenter: Dr Howard Wang (RTI)

This presentation will briefly explore the Internet of Things revolution with a focus on the Industrial Internet.

The Industrial Internet of Things "industry" is predicted to cover 2/3's of the World's economy within the next 20 years. Interoperability and connectivity between independently designed systems are the main challenges that must be addressed for this future vision to be realised.

'Accelerating Insights Through Visual Analytics'

Presenter: Tom Crauwels (Luciad)

Sensors surge and big data grows. What if we equip all cars, ships, and aircraft with environmental sensors? How do we gain knowledge from all that data?

Visual analytics, the science of analytical reasoning facilitated by interactive visual interfaces, can be a key enabler to tackle this challenge.

With the right data architecture, analysis tools and visualisation capabilities, any user can be turned into a powerful analyst that can make sense out of all geo-enabled and temporal data.

'Building Reliable Software: Programming Languages Do Count'

Presenter: Eric Perlade (AdaCore)

As the industrial IOT sphere has expanded, more and more software is running on critical devices. To help meet the resulting reliability challenges the latest version of the Ada language standard, Ada 2012, builds on Ada's longstanding support for software engineering and has introduced a contract-based programming facility that can simplify the verification effort.

This presentation will cover contract-based programming as well as other features that assist in the static or dynamic analysis of your software. It will also describe the role of formal verification using SPARK 2014 and associated tools.

'Embedded Motor Control Using Simulink'

Presenter: Ruth-Anne Marchant (MathWorks)

In this session, learn how you can design a new motor control system using Embedded Coder® from MathWorks and the C2000™ family of microcontrollers from Texas Instruments. We walk through a demo of Simulink running two three-phase motors simultaneously using the F28069M LaunchPad™ development kit and discuss how it fits into the larger model-based design workflow.

'Mechanical Packaging for Electronics'

Presenter: Rajiv Seshadri (Schroff)

This seminar will focus on heat generated by electronics, the environment in which electronics are deployed, standards and regulatory concerns and the challenges faced by 'Mechanical Packaging of Electronics'.

Agenda

Expo and Seminars
Wednesday 9th March 2016

9:15am - 4.30pm	Exhibition
9:30 - 10:15am	Seminar: 'How Do Multicore Devices Effect Security & What is Security Anyway?' Presenter: Alex Wilson (Wind River)
10:30 - 11:15am	Seminar: 'Accelerating Insights Through Visual Analytics' Presenter: Tom Crauwels (Luciad)
11:45am - 12.30pm	Seminar: 'The IIOT Evolution' Presenter: Dr Howard Wang (RTI)
1:30 - 2:15pm	Seminar: 'Building Reliable Software: Programming Languages Do Count' Presenter: Eric Perlade (AdaCore)
2:30 - 3:15pm	Seminar: 'Embedded Motor Control Using Simulink' Presenter: Ruth-Anne Marchant (MathWorks)
3:45 - 4:30pm	Seminar 'Mechanical Packaging for Electronics' Presenter: Rajiv Seshadri (Schroff)

Workshops
Thursday 10th March 2016

9:00am - 1:30pm	Workshop: 'Ada 2012 on Embedded Real-Time Systems' Presenter: Eric Perlade (AdaCore)
9:00am - 1:30pm	Workshop: 'Flexible Architecture for Lightweight & Big Data Use Cases' Presenter: Tom Crauwels (Luciad)
1:30 - 5:00pm	Workshop: 'Securing Distributed Networked Systems Using DDS' Presenter: Dr Howard Wang (RTI)

Exhibitors

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rti Your systems. Working as one.
instrument choice.com.au™ The support of a scientist with every product.
Ballard TECHNOLOGY
POLARION
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IC INTERFACE CONCEPT
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