Warwick | June 18th | WMG - University of Warwick

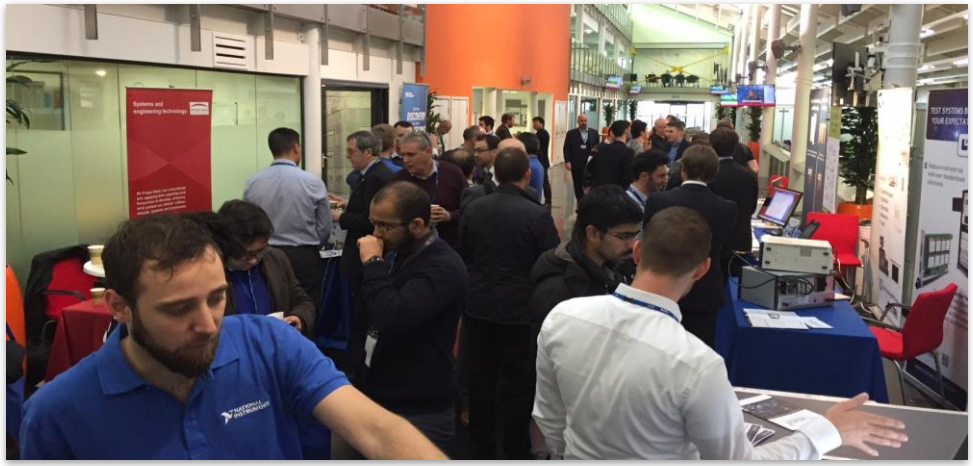
A multi-track event, with speakers from NI, WMG, JLR and other industry experts

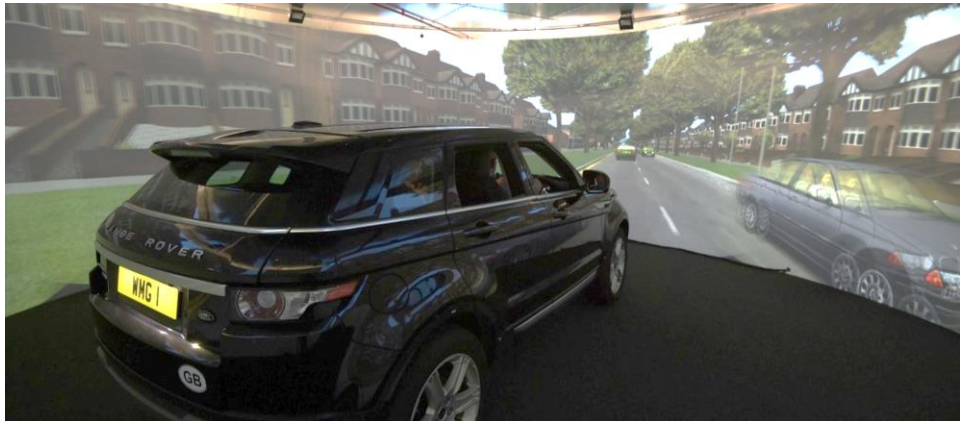
Presentation topics include:

- Data Management
- Validation & Verification
- Electric Vehicle Testing
- Active Safety and Connectivity

Reasons to attend:

- Exhibition – NI demos + partners
- Tour of 3xD Simulator
- Opportunity to meet with NI experts from the US and Europe





Contact for Daniel.Clapham@ni.com more info.

Register here: https://bit.ly/2LaJZrX

Agenda - Morning

08:30	Registration, coffe and expo
	Data Management and Validation & Verification
09:00	**Welcome and Keynote: Test Methodologies and the Role of Validation** **Gunwant Dhadyalla, Chief Engineer, WMG and Ashish Naik, Business Development - Automotive Validation Test, NI**
10:00	**How Companies are Saving Millions of $ Managing Sensor Data** **Barry Hutt,Founder and CRO Viviota Inc.** **The volume of sensor data is exploding. Accenture predicts that by the year 2020 over 60 billion sensors will be shipped worldwide. Find out how companies are dealing with this tsunami of sensor data and how they are plugging this into their IT organization in ways they never imagined. Learn how three large automotive companies have built successful data management projects and accelerated their analytics lowering expenses and accelerating innovation**
10:30	Break
11:00	**Vehicle-in-the-Loop (VIL) Test Platform** **Shailesh Patel, Vehicle-in-the-Loop Lead Engineer, JLR** An overview of VIL testing environment
11:30	**Infotainment Testing** **Serban Marfa, JLR**
12:00	**Why ISO 26262?** **Andrew Banks, Chairman of the MISRA C Working Group, LDRA** ISO 26262 remains a constant foundation in a rapidly evolving environment, defining the benchmark standard for functional safety across the vehicle life-cycle. MISRA C has been inextricably linked to the need to meet automotive functional safety requirements, with both editions of ISO 26262 suggesting the use of MISRA C. This presentation will discuss the benefits of ISO 26262, especially in the areas of verification and validation. He will explore the relationship between ISO 26262 and MISRA C, and will explain how MISRA C helps to achieve the ISO 26262 goal of safer and more secure automotive software.
12:30	Lunch, expo and tours

NATIONAL INSTRUMENTS

Keynote	Electric Vehicles
Validation and Verification	Active Safety and Connectivity
Data Management	

Agenda - Afternoon

	Electric Vehicles	Active Safety and Connectivity
14:00	**EV Testing - Overview of Testing All EV Compnents** **Professor David Greenwood, Advanced Propulsion Systems, WMG**	**ADAS and Connected Vehicles** **Expleo**
14:30	**Battery System Testing: From Cell Validation to Pack Verification** **Danson Joseph, Managing Director, Danecca Limited**	**V2X Emulator – A Smart Way of Testing V2X** **Srivathsan CR, TATA Elxsi** It is extremely critical to test V2X extensively since it is a safety critical application. There are several difficulties associated with the conventional way of V2X Field Testing such as hiring a test track, safety concerns, spectrum availability and scenario repeatability. V2X Emulator was envisioned by Tata Elxsi to overcome these challenges by performing a real-world like V2X Testing in a Lab using a modular NI equipment set-up which can generate real-world conditions that can source necessary GNSS & CAN signals for V2X application testing. The V2X Emulator software is interfaced with Maps based GUI interface to define the test cases.
15:00	Break	
15:30	**Demand for EV Technology Testing Increases – Best Practices for Test Facilities** **Mr Harri Kervinen, Director, Proventia Oy, Test Solutions** Electrification has created a new challenge to testing facilities. Tightening competition on the EV market and the growing demand for testing new complex electric and hybrid technologies mean that the test operations must be fast,safe and reliable. Testing electric powertrains is generally safer than testing combustion engines and powertrains, yet battery testing can be lot more dangerous, even hazardous. A solution for today's EV technology testing challenges are modular test facilities. Rapid deployment, safety and flexibility are the key factors in today's test capacity solutions and the ability to adapt into constantly changing testing environment favours the modular test solutions over conventional test centres.	**ADAS In-Vehicle Data Recording & Playback** **Robin Irwin, Konrad Technologies** In this session, we'll cover: -ADAS Test Challenges -System Design Considerations: In-vehicle sensor & vehicle network logging -Re-use of tools & platform across the test lifecycle -HIL playback
16:00	**Emulating EV Powertrains for HIL and System Integration** **Joergen Etter, Business Development - Electric Vehicles, NI** The powertrain of an electric vehicle reaches from the grid to the ground, and each stage contains an embedded intelligent controller. This session will address the tools and solutions for testing and validating these intelligent subsystems of the electric powertrain.	**V&V Methodologies for Testing Autonomous Vehicle Software** **Ashish Naik, Business Development - Automotive Validation Test, NI** In this session we will share methods for training and testing autonomous vehicle software stacks using high fidelity sensor and environmental simulation in simulated driving scenarios. These scenarios can be run at a massive scale on a PC, using on-prem servers, or in the cloud.
16:30	Drinks Reception	
17:30	End of Day	

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