# **ADAS 2017: ADVANCED DRIVER ASSISTANCE SYSTEMS**

Institution of MECHANICAL ENGINEERS

Conference

28-29 March 2017

Hilton Birmingham Metropole

### **KEY SPEAKERS INCLUDE:**

Francois Guichard, Manager – UN Secretary – Active Safety – Mechanical Engineer **UNECE** 

Basileios Mavroudakis, Vehicle Technology **McLaren Automotive** 

David Sanchez, ADAS Technical Specialist Jaguar Land Rover

Richard Schram, Technical Manager **Euro NCAP** 

Trevor Dorling, Digital Greenwich and Smart City Lead **Royal Borough of Greenwich** 

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## ADAS 2017: ADVANCED DRIVER ASSISTANCE SYSTEMS

## 28–29 March 2017 Birmingham

## HEAR THE LATEST DEVELOPMENTS BEING MADE WITH ADVANCED DRIVER ASSISTANCE SYSTEMS AND HOW THEY WILL PAVE THE WAY TO LEVEL 5 AUTONOMY.

Advanced Driver Assistance Systems (ADAS) are currently the fastest growing segment in automotive and one of the top four lines of focus for OEMs globally. To reduce the number of collisions and traffic incidents, vehicle manufacturers are looking to automate the driving process and eliminate human error.

Before the introduction of autonomous vehicles, conventional existing driving systems must be updated, upgraded, tested and validated. This includes the integration of driver assistance systems to help prevent and avoid incidents.

Against this backdrop, the **ADAS 2017: Advanced Driver Assistance Systems** conference will provide attendees with an understanding of the developments and innovation taking place. This will enable attendees to reach level 5 autonomy and increase vehicle safety before autonomous vehicles.

## **KEY PROGRAMME HIGHLIGHTS:**

- McLaren Automotive and Jaguar Land Rover clarify the hype from reality and how industry are cost-effectively accelerating beyond traditional ADAS to level 5 autonomy
- Gain best practices for driver interaction and integrating ADAS with the driver from Jaguar Land Rover and University of Leeds
- **Royal Borough of Greenwich** discusses lessons learned from autonomous trials on UK roads
- Hear how Ford and University of Warwick are testing and validating ADAS and future autonomous systems
- Join the debate as Jaguar Land Rover, Transport Systems Catapult and Volvo Cars discuss choosing the right sensor and combining available systems into one vision

## ATTEND THIS CONFERENCE TO:

- Learn about the cost-effective developments being made to accelerate beyond traditional ADAS
- Join key discussions with McLaren Automotive, Ford, Jaguar Land Rover, Euro NCAP, Royal Borough of Greenwich, HORIBA MIRA and many more
- Hear the latest research insights from **Transport Systems Catapult** as well as **Universities of Leeds**, **Warwick** and **Oxford**
- Gain insight into standards and regulation, safety assessments and edition two of ISO 26262 from **HORIBA MIRA** and **Euro NCAP**
- Network and engage with colleagues, peers and industry innovators from across the field of ADAS and autonomy
- Plus, join discussions on future impacts on business models, insurance responsibility during ADAS control, dealing with differing engineering within the vehicles and choosing between sensor technologies

## **2017 ADVISORY BOARD:**

Patrick Sauer, Senior Engineer, R&D Advanced Technology **Toyota Motor Europe** 

Tim Armitage, UK Autodrive Project Director **Arup** 

Nicholas Solomon, Subject Matter Expert - State Estimation, Chassis Control Systems Jaguar Land Rover

David Ward, Head of Functional Safety **HORIBA MIRA** 

Trevor Dorling, Director, Digital Greenwich and Smart City Lead **Royal Borough of Greenwich** 

## **BOOK YOUR PLACE TODAY** WWW.IMECHE.ORG/ADAS

## TERMS AND CONDITIONS APPLY

## PROGRAMME

DAY 1	28 MARCH 2017	
08:30	REGISTRATION AND REFRESHMENTS	
09:00	CHAIR'S OPENING REMARKS Tim Armitage, UK Autodrive Project Director, Arup	
09:10 PANEL DISCUSSION	DISTINGUISHING HYPE FROM REALITY: COST-EFFECTIVELY ACCELERATING BEYOND TRADITIONAL ADAS Basileios Mavroudakis, Vehicle Technology, McLaren Automotive David Sanchez, ADAS Technical Specialist, Jaguar Land Rover	
	DRIVER INTEGRATION AND INTERACTION	
09:55	<b>CHALLENGES OF AUTOMATION WITH AND WITHOUT DRIVERS IN THE LOOP</b> Oliver Carsten, Professor of Transport Safety, University of Leeds	
10:25	QUESTION AND ANSWER SESSION	
10:30	NETWORKING REFRESHMENT BREAK	
11:00	<b>BEST PRACTICE FOR DRIVER INTERACTION</b> A representative, Jaguar Land Rover	
	SAFETY AND RELIABILITY	
11:30	AN UPDATE FROM UNECE ON STANDARDS AND REGULATIONS Francois Guichard, Manager – UN Secretary – Active Safety – Mechanical Engineer, UNECE	
12:00	<b>UPDATE ON EDITION TWO OF ISO 26262</b> David Ward, Head of Functional Safety, HORIBA MIRA	
12:30	QUESTION AND ANSWER SESSION	
12:45	NETWORKING LUNCH	
13:45	EURO NCAP IMPACTING ADAS DEVELOPMENT Richard Schram, Technical Manager, Euro NCAP	
14:15	<b>DESIGNING TO AVOID A SINGLE POINT OF FAILURE</b> Speaker to be announced	
	ADAS IN HEAVY DUTY VEHICLES	
14:45	IMPLEMENTING DRIVER ASSISTANCE ON HEAVY GOODS VEHICLES John Comer, Product Manager, UK and Ireland, Volvo Trucks	
15:15	QUESTION AND ANSWER SESSION	
15:30	NETWORKING REFRESHMENT BREAK	

## For the most up-to-date and detailed programme for the event, please visit: www.imeche.org/ADAS

• This programme is subject to change.

• The Institution is not responsible for the views or opinions expressed by individual speakers.

16:00	ROUNDTABLE DISCUSSIONS			
	Led by:			
	Tim Armitage, UK Autodrive Project Director, Arup			
	Simon Baker, Head of Commercial Underwriting, AXA			
	David Sanchez, ADAS Technical Specialist, Jaguar Land Rover			
	<ul> <li>How will autonomy impact business models in the future?</li> </ul>			
	<ul> <li>Who is responsible for insurance when ADAS takes control?</li> </ul>			
	<ul> <li>ADAS is not autonomous and its communication must be clearer</li> </ul>			
16:45	<b>ROUNDTABLE FEEDBACK</b> Summary and key highlights of each of the discussions relayed to the group.			
17:05	CHAIR'S CLOSING REMARKS			
17:15	END OF DAY ONE			

DAY 2	29 MARCH 2017	
08:30	REGISTRATION AND REFRESHMENTS	
09:00	<b>CHAIR'S OPENING REMARKS</b> Tim Armitage, UK Autodrive Project Director, Arup	
09:10 KEYNOTE ADDRESS	<b>UPDATES FROM THE FIELD: LESSON FROM AUTONOMOUS TRIALS ON THE UK ROADS</b> Trevor Dorling, Director, Digital Greenwich and Smart City Lead, Royal Borough of Greenwich	
	TESTING AND VALIDATING	
09:40	<b>TESTING OF ADAS AND FUTURE AUTONOMOUS SYSTEMS</b> Paul Jennings, Professor, WMG, University of Warwick	
10:10	DESIGN AND VALIDATION OF THE DRIVER ASSISTANCE SYSTEM USING SIMULATION Payman Shakouri, Consultant Engineer, Altran UK	
10:40	QUESTION AND ANSWER SESSION	
10:50	NETWORKING REFRESHMENT BREAK	
	SENSOR SYSTEMS	
11:20 PANEL DISCUSSION	<b>CHOOSING THE RIGHT SENSOR SYSTEM</b> Martine Harvey, Senior Technologist, Transport Systems Catapult Henrik Lind, Technical Expert, Volvo Cars Paul Widdowson, Vision & Guidance Projects Leader, Jaguar Land Rover	
11:50	SENSOR FUSION: COMBINING AVAILABLE SYSTEMS INTO ONE	

Paul Widdowson, Vision & Guidance Projects Leader, Jaguar Land Rover

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12:20	SAFETY RATINGS, ADAS HOMOGENIZATION AND NON-SAFETY USE CASES FOR ADAS SENSORS		
	James Hodgson, Research Analyst - Autonomous Driving and Location Tech, ABI Research		
12:50	QUESTION AND ANSWER SESSION		
13:00	NETWORKING LUNCH		
14:00	COMMUNICATING FROM VEHICLE TO VEHICLE AND VEHICLE TO INFRASTRUCTURE (V2X) Martine Harvey, Senior Technologist, Transport Systems Catapult		
	DATA CAPTURE AND USE		
14:30	<b>PROCESSING AND MAKING SENSE OF THE DATA</b> Professor Paul Newman, BP Professor of Information Engineering, University of Oxford		
15:00	QUESTION AND ANSWER SESSION		
15:15	NETWORKING REFRESHMENT BREAK		
15:45	<b>ROUNDTABLE DISCUSSIONS</b> Led by: Oliver Carsten, Professor of Transport Safety, University of Leeds Alan Thomas, Director, CAVT Paul Widdowson, Vision & Guidance Projects Leader, Jaguar Land Rover		
	<ul> <li>How will autonomous vehicles work on normal roads?</li> <li>Dealing with differing engineering within the vehicle</li> <li>Choosing between sensor technologies</li> </ul>		
16:30	<b>ROUNDTABLE FEEDBACK</b> Summary and key highlights of each of the discussions relayed to the group.		
16:50	CHAIR'S CLOSING REMARKS		

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### FEES AND CHARGES

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Delegate Type	<b>Early Bird Rates</b> Until 24 February 2017	Standard Rates
Member, Institution of Mechanical Engineers/Supporting organisation	£359 + VAT = £430.80	£399 + VAT = £478.80
Non-member	£449 + VAT = £538.80	£499 + VAT = £598.80
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2 Email: eventenguiries@imeche.org

#### 3 Phone +44 (0)20 7973 1251

Please read the information listed below as each booking is subject to the Institution's standard terms and conditions.

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Completed application forms should be returned to the address above, along with the correct payment. Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible entry.

### SPECIAL REQUIREMENTS

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#### **CONFERENCE VENUE**

Hilton Birmingham Metropole

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#### www.imeche.org/ndt2017



### **MIDLANDS ENGINEERING DINNER**

#### 31 March 2017, Birmingham

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#### www.imeche.org/ midlandsengineeringdinner

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