

WEDNESDAY 4 NOVEMBER 2020

09:00 ET BOSCH: SYSTEM-OF-SYSTEMS VALIDATION FOR ADAS AND AUTONOMOUS DRIVING

ADAS and AD poses a complex challenge to the mobility engineers with regards to verification and validation. The intelligent SW intensive automotive systems are no more deterministic in nature, which requires them in theory to be validated for billions of kilometers. In parallel, the continuous evolution of vehicle architectures also requires a different validation approach. In this session, discover how Bosch addresses these challenges by implementing a system-of-system validation method over the entire vehicle development cycle.

- Scenario based validation, combining field-based and synthetically generated test cases
- Partially validating scenarios in simulation environments, depending on the test strategy defined for the corresponding platform
- Software-in-Loop validation approach combined with field-based validation helps to reduce the development cycles and enable a faster market introduction

ANUPAM GUPTA, HEAD OF ENGINEERING & LEAD, COE - VERIFICATION & VALIDATION, ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS MATTHIAS SCHMIDT, PRODUCT MANAGER, VERIFICATION AND VALIDATION, BOSCH ENGINEERING GMBH

10:00 ET SENSING MODALITIES, SENSOR FUSION AND PERCEPTION FOR AUTOMATED DRIVING

All Automated Driving systems require the application of multiple sensors. Processing the raw sensor data to extract the different object classes and positions, the driveable area, etc. is the task of the perception stack. When integrating multiple sensing modalities, the quality of the sensor fusion can make the difference between a marginal solution and an exceptional one. In this session, discover:

- The different sensing modalities (lidar, radar, camera)
- The pros and cons of the different modalities
- The difference between raw data and object level data
- The different fusion approaches: object level vs raw data
- How raw data fusion can optimize both performance, safety and computing requirements

PIERRE OLIVIER, CHIEF TECHNOLOGY OFFICER, LEDDARTECH

11:00 ET HOW 4D IMAGING RADAR IS BRINGING THE CERTAINTY THAT ADAS AND AV ECOSYSTEMS DEMAND

I4D imaging radar can provide full-stack solutions for a challenging and rigorous ADAS landscape by providing exceptional reliability, affordability and efficiency. In this session, discover a comprehensive overview of this multifunctional technology, and explain how 4D imaging radar offers a gateway to full vehicle autonomy, while bridging the gaps ADAS development faces today, all with single-chip sensors. Less than 4 of Vayyar's 4D imaging radar sensors can replace up to 14 other ADAS sensors, delivering:

- Unprecedented resolution and support for advanced applications, addressing the most challenging safety requirements.
- An ultra-wide field of view that yields more accurate sensing, with less hardware and lower costs.
- Reduced computing resource, made possible by extensive processing and computing on our high performance 4D imaging radar-on-chip.

ILAN HAYAT, DIRECTOR OF AUTOMOTIVE, BUSINESS DEVELOPMENT, VAYYAR IMAGING

12:00 ET PUTTING COMPLIANCE ON AUTOPILOT FOR AUTONOMOUS VEHICLES

Companies developing software-driven cars must comply with functional safety and security standards, however addressing it at the end of the development lifecycle could lead to costly mistakes and lost productivity. In this presentation, discover methods and approaches to integrate ISO 26262 compliance through functional safety checks as part of your CI/CD Gitlab/GitHub/BitBucket development pipeline.

- Make functional safety compliance more agile
- Put functional safety compliance on autopilot
- Produce reports with progress towards compliance at every built

ANDREY MADAN, SR. SOLUTIONS ARCHITECT, PARASOFT NEIL LANGMEAD, DIRECTOR OF PROFESSIONAL SERVICES, LATTIX



THURSDAY 5 NOVEMBER 2020

09:00 ET VOLVO'S GOLDEN RULE FOR CYBER SECURITY IN AUTONOMOUS VEHICLES

There is no predicting when self driving cars will take over the roads, but one thing that must be considered is the security involved across all aspects of an autonomous vehicle. In this session, discover why Volvo Car Corporation's golden rule for cyber security is to start with people.

- Keeping up to date with regulations and legislations around cyber and autonomous vehicles
- Educating internal and external stakeholders on safe and secure procedures
- Ensuring interoperability across all autonomous applications

ELPIDOFOROS ARAPANTONIS, SOLUTION ARCHITECT, VOLVO CAR CORPORATION

10:00ET ENSURING WORLD CLASS SAFETY IN AUTONOMOUS VEHICLES AT ZENSEACT

In advance of autonomous vehicles taking precedence on roads, safety standards have been implemented across the globe. While working with the most exciting concepts and products for next generation cars, in this session, discover how to ensure world class safety in Autonomous Vehicles.

- Challenges and enabling technologies for autonomous driving
- Managing functional safety and focusing on nominal safety
- Ensuring safety with related applications and systems such as ADAS and ADS

HÅKAN SIVENCRONA, SAFETY OFFICER, ZENSEACT