ADAS
& AUTONOMOUS VEHICLE
TECHNOLOGY SUMMIT
★ NORTH AMERICA ★
AUGUST 27 & 28, 2025
SAN JOSE, CA, USA

San Jose McEnery Convention Center will once again play host to ADAS & Autonomous Vehicle Technology Summit, the international event for leaders in ADAS, automated driving and convergent technologies

By Charlotte Iggulden

Go west

R eturning to San Jose this August, ADAS & Autonomous Vehicle Technology Summit North America will showcase the latest products, technologies and services from across the advanced mobility ecosystem to accelerate scalable end-to-end product development and deployment, improve quality and safety and reduce costs.

It's the essential event for those wanting to maintain their competitive edge by keeping pace with innovation, technological advances and regulatory changes in a rapidly evolving industry.

Visitors can see cutting-edge developments in ADAS/AV software and hardware, processing, testing tools, artificial intelligence and V2V/V2X, with industry experts on hand from Segments.AI, Oxford Technical Solutions, Xylon, RunSafe Security, Rohde & Schwarz, LaVision, AB Dynamics, Deepen AI, Deontic and more, from the big players to the startups.

Meanwhile, the conference will host 50+ speakers from OEMs, regulators and tech innovators, who will discuss the key topics concerning the development and testing of safe autonomous driving and ADAS technologies. Contributors will include Waymo, Plus, Zoox, Carnegie Mellon University, Torc Robotics, Uber, AWS, IBM, CA DMV, PAVE, Woven by Toyota, GM and Nissan.

New for 2025

OPEN TECH FORUM:
August 27 & 28

Hear industry experts present innovative concepts, prototypes and future trends in ADAS and autonomous vehicle development;

WORKSHOP - SPECIFYING AN ODD:
August 28

Learn how to specify the ODD in a machine-readable and human-interpretable fashion.

Register now for your free event pass!

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Get involved online!

AUGUST 27 & 28, 2025, SAN JOSE, CA, USA

Liquid-cooled sensor fusion for harsh environments

Crystal Group

Crystal Group will demonstrate its AVC0600 in action at the expo. This liquid-cooled, IP67 fully sealed system delivers GPU-driven onboard AI that can operate in the harshest conditions – in-vehicle and edge-deployed in scorching heat, intense humidity and unrelenting vibration.

The AVC0600's precision liquid cooling system enables sensor fusion and inferencing for ADAS and autonomous machines – from off-road defense platforms to commercial fleets – while running GPU-intensive workloads without throttling. The compact, 330mm-deep, 18kg chassis with dual U.2 NVMe, flexible I/O and 18-36V DC rugged power can be dropped straight into tactical vehicles or commercial testbeds.

BOOTH: 4025

Next-generation ADAS testing solutions

AB Dynamics

AB Dynamics will showcase an array of ADAS testing technologies at the expo, with LaunchPad Spin and GTC Remote taking center stage.

The GTC Remote is a ruggedized handheld controller designed to streamline ADAS testing by removing the need for a static base station. Ideal for single-target VRU scenarios, it improves test efficiency through its portability, simplified workflows and quick deployment capabilities.

The LaunchPad Spin is a highly maneuverable ADAS target platform designed to replicate challenging urban test scenarios. With torque vectoring drive and a 360° steerable front wheel, it replicates unpredictable behavior, such as a pedestrian doubling back or weaving between obstacles. The platform supports a range of VRU targets, reaches 30km/h and accelerates at 3m/s².

Also featured will be the Halo, AB Dynamics' most versatile steering robot, and a selection of ADAS targets developed by sister company and co-exhibitor DRI, including the Soft Motorcycle 360 and Soft Bicycle 360.

BOOTH: 4080

Joy Carpio, autonomous systems researcher, Nissan Advanced Technology Center, Silicon Valley

NISSAN

DAY 1, AUGUST 27, ROOM 1

Cooperative driving automation for congestion management: A field study for Highway I680 in California

The Cooperative Driving Automation Phase II project implemented a hierarchical controller integrating a cloud-based speed planner with onboard driving automation controllers. Conducted as a field test on I-680N traffic in California, a fleet of connected and automated vehicles applied real-time speed advisories to preempt shockwaves and reduce stop-and-go behavior. Key performance metrics – including hard-braking events, time-to-collision (TTC) occurrences, acceleration variability and stoppage time – demonstrated significant improvements: up to an 85% reduction in intense braking, elimination of sub-two-second TTC events, 20% smoother driving speed fluctuation, and a 70% drop in near-stop time. Results validate this approach's feasibility and safety benefits for real traffic smoothing.

This presentation will cover understanding the hierarchical CCM system combining cloud speed planner with local vehicle controllers; recognizing measured safety gains – up to 85% reduction in hard-braking events; appreciating key performance metrics – time-to-collision, acceleration distribution and stoppage time; and learning implications for scaling CCM – macroscopic impact and recommendations for broader deployment.

DEDICATED SUMMIT* FEATURING 50+ SPEAKERS
*RATES APPLY

Scan the QR code or visit the website to see the latest program and speaker details:

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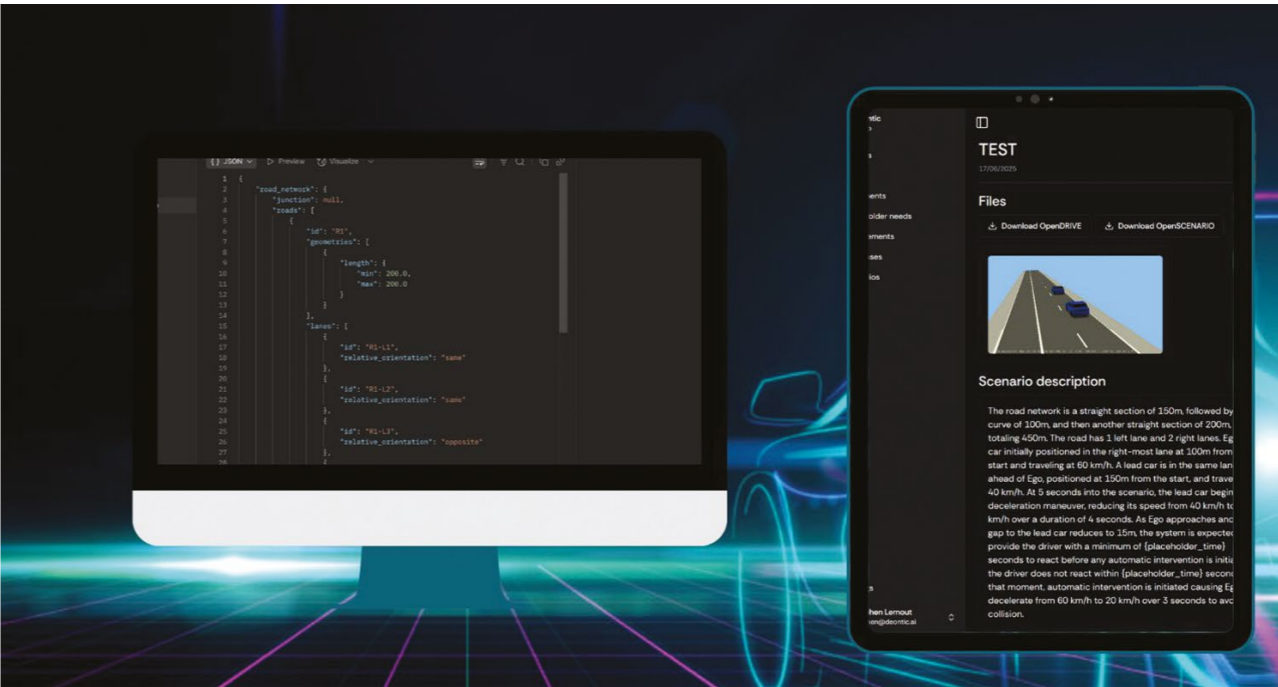
Accelerated ODD validation

Deontic

Deontic is a generative AI platform that revolutionizes the validation and certification of autonomous systems. Tailored for the complex demands of the autonomous driving industry, it accelerates operational design domain (ODD) validation through advanced natural language processing, agent-based automation and deep integration with numerous simulation tools and standards such as OpenScenario and OpenDrive.

At the heart of Deontic's solution is its ability to transform high-level, often ambiguous natural language requirements into clear, testable, compliant simulation scenarios. This enables companies to move from manual ODD validation processes – often taking up to 60 days per ODD – to automated workflows requiring just six working days.

Deontic's value lies in its ability to integrate seamlessly with existing validation pipelines, reduce dependency on large engineering teams and provide traceable, repeatable and regulatory-ready outputs. Currently in beta, Deontic positions itself as the foundational platform for certifying all forms of 'physical AI' beyond just vehicles, spanning drones, robotics and industrial automation and paving the way for safer autonomous technology at scale.

Find out more from the company's experts at the show.

BOOTH: 2035

Optimizing image quality for autonomous driving

LaVision

Increasingly sophisticated ADAS needs to be able to detect objects at greater distances on the highway to ensure safety when cruising at higher speeds, meaning cameras for this purpose need lenses with a longer focal length. However, the optical quality of the windshield and the reduction in contrast can have a negative impact on the camera image quality.

The LaVision Glass-SFR inspex system provides pointwise measurements of the spatial frequency response (SFR) of a windshield in the camera's field-of-view to characterize the optical quality of the lens/windshield combination. The high-resolution camera-based system uses a large number of SFR targets to enable the analysis of different viewing angles
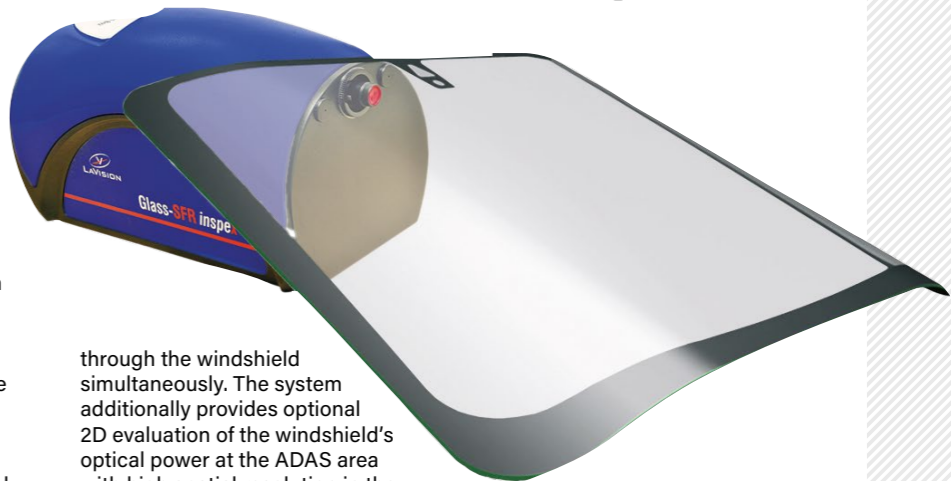
through the windshield simultaneously. The system additionally provides optional 2D evaluation of the windshield's optical power at the ADAS area with high spatial resolution in the sub-millimeter range.

The flexible usage of customer ADAS lenses with LaVision's Glass-SFR inspex system offers the analysis of different lens and windshield combinations at an early stage and helps drastically reduce development time. Visit the team in San Jose to find out more.

BOOTH: 3035
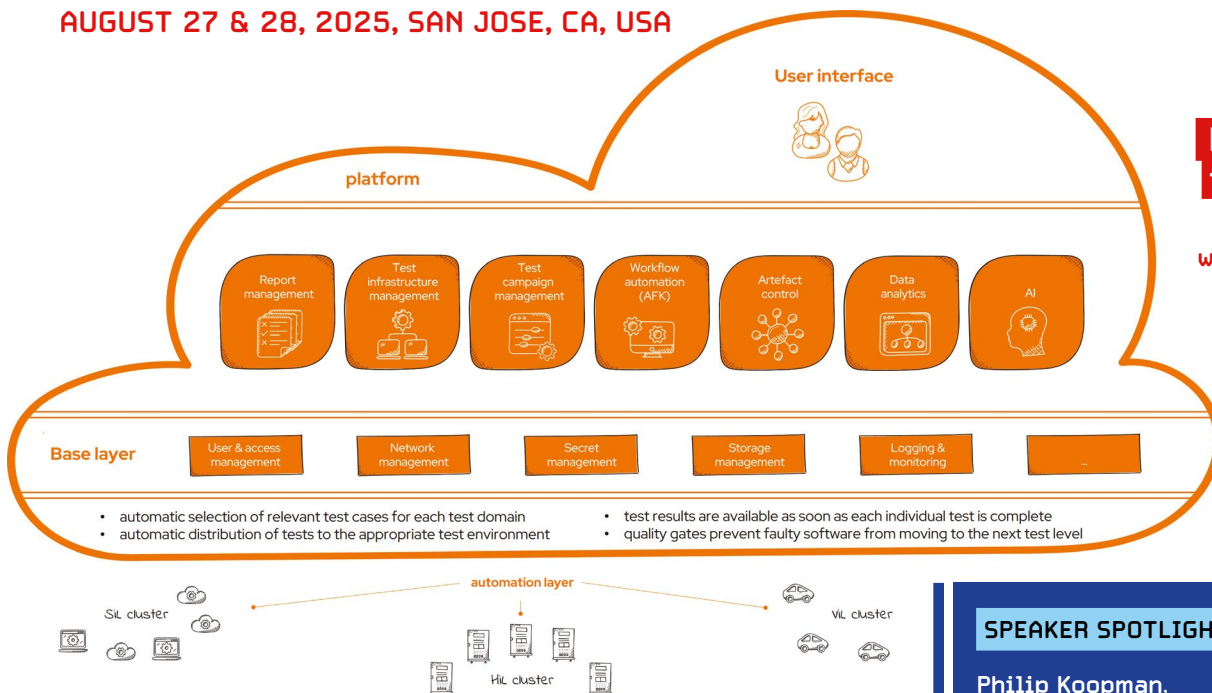
E2E automation platform for CI/CD for functional software testing

tracetronic

Traditional software testing in embedded systems has followed a V-shape model for many years, where testing on the unit, integration and system levels is typically initiated only after the development stages are complete. This approach ensures traceability and validation at each level; however, the effects of testing later can increase OEM costs and delay developer feedback, leading to delayed time-to-market.

At the expo, tracetronic will showcase how it enables OEMs and Tier 1s to test earlier in the development process. one:cx empowers teams to shift left by streamlining continuous testing, rapid feedback, high automation and full traceability across all stages of the development process. This approach promotes early detection of software defects, faster iterations and greater adaptability to changing system requirements. With a modular foundation, the tracetronic platform enables seamless integration, allowing engineers to use the best tool for each stage of development – MIL, SIL, HIL and VIL.

BOOTH: 1020

Next-gen eCall conformance testing

Keysight

Keysight will be showing its E6950B conformance test solution designed to validate in-vehicle emergency call systems across Pan-European eCall, ERA-GLONASS and Next Generation (NG) eCall standards. It's designed to deliver fully automated, end-to-end testing – simulating public safety answering points (PSAPs), cellular networks and GNSS environments – to ensure compliance with CEN 17240 and ETSI 103 683.

Now certified by DEKRA for NG eCall PSAP functionality, the E6950B supports IMS/SIP-based NG eCall, offers optional audio quality analysis (PESQ/POLQA) and operates independently of live mobile networks. This enables OEMs and Tier 1 suppliers to accelerate development cycles while ensuring robust emergency communication capabilities.

With its modular architecture and seamless integration with Keysight's UXM5G and PathWave Test Automation, the E6950B empowers engineers to meet evolving regulatory demands and enhance vehicle safety in today's increasingly connected world.

BOOTH: 3000

Philip Koopman, associate professor, Carnegie Mellon University

Carnegie Mellon University

DAY 1, AUGUST 27, ROOM 1

Understanding self-driving vehicle safety

Removing the human driver fundamentally changes what we actually mean by acceptable safety. A simplistic 'safer than human driver' positive risk balance approach must be augmented with additional considerations regarding risk transfer, negligent driving behavior, standards conformance, absence of unreasonable fine-grain risk, ethics and equity concerns. Current standards frameworks and accompanying definitions are likely to be inadequate to ensure safety due to implicit assumptions that are violated when the human driver is removed. A framework relates risk to acceptable safety in a way that is applicable to all autonomous systems.

Prof. Koopman will look at why positive risk balance will not give socially acceptable safety, examples of safety issues in the news beyond positive risk balance, and how to define acceptable safety for at-scale deployments.

Scan the QR code or visit the website to see the latest program and speaker details:

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HIL test bench for ZF's forward-facing Smart Camera 6

Xylon

Xylon will offer live demonstrations of its HIL setup for ZF's forward-facing Smart Camera 6 at the expo – using raw and synthetic sensory data.

With its flexible and modular architecture, Xylon's LogiRecorder 3.5 automotive HIL video logger enables replay of all ZF smart camera interfaces, including the automotive LVDS video, CAN and ethernet data. It enables ZF engineers to iterate through different HIL simulation scenarios in a laboratory setup, and inject recordings into the ZF smart camera's vision processor while simultaneously recording the Mobileye EyeQ6L-generated debug data.

HIL simulations with synthetically generated data offer better controllability and more economical testing, requiring fewer test-driven miles. The LogiRecorder enables the ZF simulation and test teams to stimulate their smart camera with synthetic data generated in a preferred simulation environment. Synthetic simulations provide developers with the freedom to test corner-case traffic situations until the control algorithms are fully perfected.

BOOTH: 2030

Label QA bottleneck solution

Deepen AI

Faulty labels can halt an entire vision program, yet most teams still hunt for errors frame by frame. Deepen Validate is designed to remove that pain. The latest release merges auditing, validation and automated checks in a single console, on-prem or in the cloud. Smart sampling highlights the small fraction of data most likely to hide issues, while built-in detectors flag misclassifications, duplicates and drift as they happen. Deepen Validate turns label quality from a last-minute scramble into a continuous, confident development step. It adds to Deepen AI's data stack, which also delivers annotation, calibration, anonymization and simulation tools for safety-critical perception teams. Meet the team in San Jose to find out more.

BOOTH: 1030
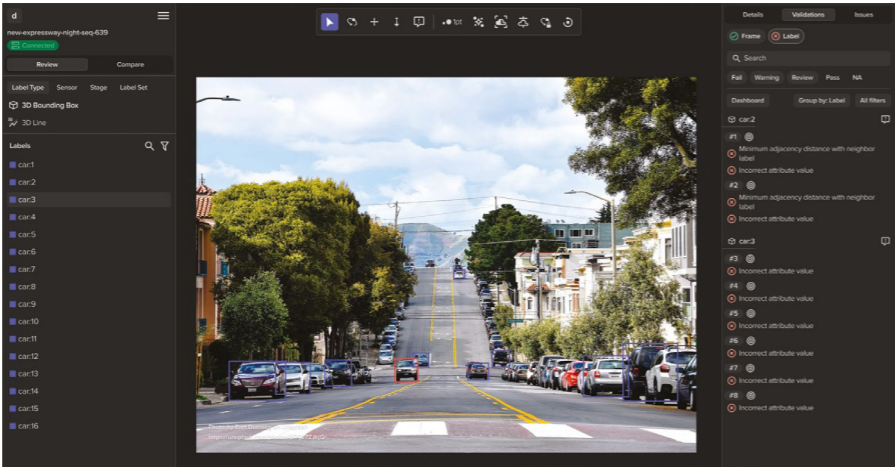
Motorcycle and bicycle soft targets

DRI

DRI will be using the ADAS & Autonomous Vehicle Technology Summit to unveil the Soft Motorcycle 360. Designed for high-speed, high-accuracy testing, this powered two-wheeler target reaches speeds up to 80km/h and meets Euro NCAP 2023 motorcycle test protocols. Built with modular foam construction, it delivers safe impact performance, durability and repeatability, aligning with ISO 19206-5 draft standards.

Also featured is the Soft Bicycle 360, the latest addition to DRI's Soft Target 360 family. Engineered to simulate realistic cyclist behavior in complex urban and intersection scenarios, it includes articulated limbs, lightweight modular foam, and a rubberized skin to minimize vehicle damage. It integrates seamlessly with leading test platforms, including AB Dynamics' LaunchPad range, and supports synchronized motion for precise scenario replication.

DRI will be co-exhibiting with sister company AB Dynamics, and will showcase the latest VRU testing solutions, including LaunchPad Spin and GTC Remote, built to meet the evolving demands of global ADAS and AV testing.

BOOTH: 4080

Software erosion prevention in safety-critical ADAS

Qt Group

As ADAS and autonomous vehicle software grows more complex, so does the risk of software erosion (also known as technical debt), including dead code, architectural drift and compliance gaps. At this year's expo, Qt Group will demonstrate why Axivion Suite is trusted by numerous leading automotive companies to help their engineering teams eliminate these issues early.

Axivion's Static Code Analysis and Architecture Verification solutions provide deep visibility into C, C++, C# and CUDA codebases, ensuring that safety standards including ISO 26262 and MISRA are continuously enforced. Axivion automates detection of unreachable code, clones and deviations from intended architectures, helping developers pinpoint the issues that cause technical debt to accumulate. It also offers metric monitoring, defect analysis and cycle detection.

For developers building next-generation ADAS features, Axivion's Architecture Verification supports clean, maintainable software architectures that scale across platforms and projects. For safety and compliance engineers, its Static Code Analysis is certified for use in safety-critical environments and offers detailed traceability, simplified audits and peace of mind.

Visit Qt Group's booth to get a live demonstration of how Axivion can be used to support long-term maintainability, faster certification, and the development of safer, more reliable ADAS.

BOOTH: 3030

GNSS-denied navigation

OXTS Ltd

Sensor fusion is key to unlocking the potential of GNSS-denied navigation. Urban canyons and tunnels have gotten in the way of reliable, consistent and accurate data collection for far too long. Whether to validate an ADAS sensor or enable autonomous navigation, the challenge remains the same: No GNSS equals inaccurate data.

However OXTS will demonstrate how it is breaking down the barriers to entry in these environments with WayFinder – a single, multi-sensor fusion navigation platform. Engineered to use existing infrastructure, for example buildings, to constrain position drift in challenging GNSS conditions, WayFinder is paving the way for accurate data collection in any environment.

Whether you want to use a single platform for data collection, or enhance your existing OXTS investment, stop by Booth 4065 to learn more.

BOOTH: 4065

EVENT PREVIEW

AUGUST 27 & 28, 2025,
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CONFERENCE PLANNER

» Through a mix of keynote presentations, live panel discussions, workshops and the latest case studies, the dedicated conference (rates apply) at ADAS & Autonomous Vehicle Technology Summit North America in San Jose, California, will provide one of the best networking and intelligence-gathering opportunities of the year.

Hear firsthand from the engineers and experts shaping the future, with exclusive insights from real-world deployments and pilot projects, through to the most advanced AI and simulation showcases, as well as the latest standards and regulations. With ample opportunity for questions, it's a great way to progress your program and knowledge in just a few days!

WORKSHOP: SPECIFYING AN ODD

DAY 2 | AUGUST 28 | ROOM 2

Participants will learn how to specify the ODD in a machine-readable and human-interpretable fashion, and how to analyze real-world conditions and exclude unsuitable ones. The workshop will also reveal the use cases and data required to support ODD evaluation, and include discussion of the various technologies and data sources involved. Finally, it will cover how to use these definitions in simulation toolchains to determine the impact of specific capabilities.

Edward Schwalb, consultant, Schwalb Consulting

PANEL DISCUSSION

DAY 2 | AUGUST 28 | ROOM 1

AVs and public acceptance: How can engineers help ready the public for widespread deployment?

- **Dave Tokic,** VP of corporate development at Torc Robotics
- **Stephen Hayes,** VP of autonomous, fleets and driver operations, Lyft
- **Francesca Favarò,** head of safety best practices at Waymo
- **Katelyn Magney-Miller,** communications director at PAVE

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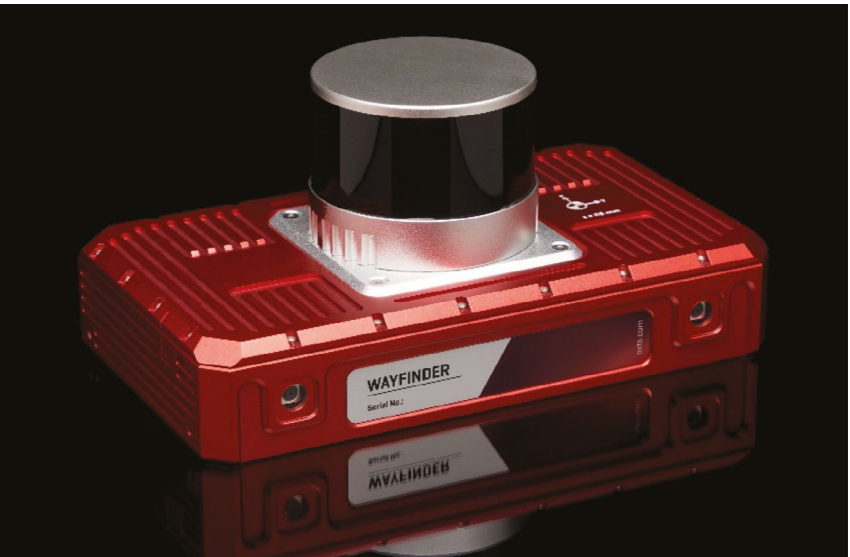The conference program features 50+ speakers, 40+ presentations, two panel discussions and a deep-dive workshop. For full details, please visit **www.adas-avtexpo.com/california**. Here are some selected highlights…

DAY 1
WEDNESDAY, AUGUST 27

Safely deploying ADAS and autonomous vehicle technologies: Challenges and innovations
9:00AM-12:30PM | ROOM 1

Understanding self-driving vehicle safety
Prof. Philip Koopman, associate professor, Carnegie Mellon University, USA

Safety considerations for personal autonomous vehicles (PAVs)
Shelly Chaka, executive director, safety assurance for effective autonomous driving software, GM

Cooperative driving automation for congestion management: A field study for Highway I680 in California
Dr Joy Carpio, autonomous systems researcher, Nissan Advanced Technology Center, Silicon Valley, USA

Standards, regulations and legal issues
2:00PM-5:00PM | ROOM 1

Autonomous vehicles – California regulatory overview
Miguel Acosta, chief, Autonomous Vehicles Branch, CA DMV

Ruby slippers and AV regulation: Did we have the tools we needed all along?
Joshua Wilkenfeld, senior director, regulatory, emerging technology, Uber, USA

Blocked force and sound power requirements for AV sensors
Sathyasheelan Santhanam, hardware engineer, Torc Robotics

Developments in AI, architecture and software
9:00AM-5:00PM | ROOM 2

Safe machine learning in automotive
Rinat Asmus, vice president – software-defined vehicle, Tata Technologies, USA

The foundation of trust: Advanced safety in the software-defined vehicle era
Javed Khan, president of software and advanced safety and user experience, Aptiv

SDV: Connecting the dots between research and current development
Khaled Alomari, manager – software-defined vehicle, MHP – a Porsche company

Driving ADAS innovation and time-to-market through the use of Gen AI
Ramya Winstead, global tech leader, high-performance computing and Gen AI, Amazon Web Services

AI model deployment and optimization in autonomous driving
Yuchuan Gou, machine learning engineer, Zoox

Reimagining autonomous trucking with VLMs and end-to-end models*
Anurag Paul, staff research engineer, Plus
Inderjot Saggu, staff research engineer, Plus

*Exclusive interview with *Anurag Paul* and *Inderjot Saggu*, staff research engineers, Plus
Reimagining autonomous trucking with VLMs and end-to-end models
Read the interview online

DAY 2
THURSDAY, AUGUST 28

Safety innovations and best practices for their development and deployment
9:00AM-12:30PM | ROOM 1

Waymo Driver safety and deployment readiness: Methodologies and criteria for absence of unreasonable risk
Francesca Favarò, head of safety best practices, Waymo

A data-driven safety evaluation framework for highly automated driving
Dr Sagar Behere, vice president of safety, Foretellix

Real-world, proving ground and integrated virtual testing
2:00PM-5:00PM | ROOM 1

Traffic rule compliance assessment for autonomous vehicles
Ching-Yi Chen, technical consultant, Smart Mobility Living Lab, TRL

Reframing lidar: Lessons from China's deployment for global ADAS
Peipei Zhao, president, North America, RoboSense

Developments in ODDs and scenarios, simulation, validation and in-the-loop testing
9:00AM-12:25PM | ROOM 2

Accelerating automated vehicle validation with OpenX: Benefits and implementation insights
Michael Peperhowe, director, simulation models and scenarios, dSPACE

Workshop | Specifying an ODD
Dr Edward Schwalb, consultant, Schwalb Consulting

Developments in AI, architecture and software (continued)
1:45PM-4:30PM | ROOM 2

Overcoming network and interoperability challenges in software-defined vehicles
Marty Gubow, TSN program manager, Keysight Technologies

Qualification of AI/ML systems and interfacing devices
Alex Lim, lead field application engineer, LDRA

New for 2025 | Free-to-attend Open Tech Forum
Hear from industry experts at the forefront of ADAS and AV development and deployment

What to expect
- Product launches
- The latest developments and technologies helping engineering teams to improve system safety and reliability and speed up development
- Details on how to implement the most time-saving and cost-effective solutions in crucial test and validation programs
- Exploration of the end-to-end development ecosystem
- The whole spectrum of ADAS and AV – from testing tools, dataloggers, AI solutions, simulation, annotation, sensors, detection and perception, communication and security, mapping and localization, through to continued system performance and much more!

Please note, this program may be subject to change