Automated Driving 2024
Engineering Level X
19 – 20 March 2024
Frankfurt am Main, Germany
Welcome

Advanced driver assistance systems (ADAS) are being continuously further developed to provide ongoing support for users. The main aims are not only to increase road safety, but also to improve the availability of the systems and to achieve their acceptance in the market.

For this purpose, areas such as sensor functions, environment modeling, situation prediction, trajectory planning, and decision-making on the one hand, and computer technology and V2X communication on the other must be optimized – supported by AI – in order to develop the necessary system-of-systems architectures.

The 9th International ATZ Conference “Automated Driving” provides a forum for development methodology, technology stacks, and security. It addresses the German government’s strategy on Automated and Connected Driving and discusses engineering and technologies for automated driving from Level 2+ upwards.

We look forward to your participation in the conference.

On behalf of the Scientific Advisory Board

Stay at the cutting edge!

- Highly relevant technical papers presented by renowned speakers
- Networking in the international expert community
- Innovative products and services
Automated Driving

In order to be successful, concepts for future mobility solutions need to be developed from the perspective of user groups, urban and rural regions, and targeted business models. The focus must be on road safety and efficient performance, as well as on ecological, economic, and social aspects. In addition, automated driving functions will sustainably support users.

As an information and communication platform, the International Conference “Automated Driving” is dedicated to the key aspects of the mobility transformation.

Scientific Advisory Board

Our Scientific Advisory Board, which is made up of prominent figures from the relevant field, provides support during the planning phase of the conference and helps to identify suitable topics.

With its expertise the board has made a valuable contribution to the choice of themes for the lecture program.

Jan Ackermann
IAV GmbH

Andrea Conti
AVL List GmbH

Dr. Thomas Dieckmann
ZF Group

Nicole Donhauser
Elektrobit Automotive GmbH

Dr. Robert Fuchs
JTEKT Corporation

Simon Fürst
BMW Group

Dr. Karl-Heinz Glander
NNG

Dr. Alexander Heintzel
Editor-in-Chief ATZ | MTZ | ATZelektronik, Springer Nature

Dr. Andree Hohm
Continental Teves AG & Co. oHG

Jörg Hölig
EDAG Engineering GmbH

Helge Kiebach
KTI GmbH & Co. KG

Dr. Johannes Liebl
Editor-in-Charge ATZ | MTZ | ATZelektronik, Springer Nature

Georges Massing
Mercedes-Benz AG

Jérôme Rigobert
Robert Bosch GmbH

Steffen Schmidt
IPG Automotive GmbH

Tino Schulze
dSPACE GmbH

Walter Schwertberger
MAN Truck & Bus SE

Prof. Andre Seeck
Federal Highway Research Institute (BAST)

Dr. Andreas Teuner
ZF Active Safety GmbH
09:15 Welcome and opening of the conference
Dr. Alexander Heintzel, Editor-in-Chief ATZ | MTZ Group, Springer Nature, Germany;
Prof. Dr. Prof. h.c. Dr. h.c. Torsten Bertram, Head of the Institute of Control Theory and Systems Engineering (RST), TU Dortmund University, Germany

09:30 – 10:30

KEYNOTE LECTURES I
Moderation: Dr. Alexander Heintzel, Editor-in-Chief ATZ | MTZ Group

09:30 Navigating the path to mass market autonomous mobility
Prof. Shai Shalev-Shwartz, CTO, Mobileye, Israel

10:00 Sustainable Urban Mobility Frankfurt (SUMP): risks and opportunities of autonomous vehicles
Heiko Nickel, Head of Strategic Transport Planning, City of Frankfurt am Main, Germany

10:30 Refreshment break with coffee and tea in the exhibition area

11:00 – 12:30

DEVELOPMENT METHODS I
Moderation: Andrea Conti, Vice President ADAS/AD, AVL List GmbH, Austria

11:00 Application of MBSE methods in virtual homologation procedures for automated driving functions
Till Temmen, Project Engineer FEV.io GmbH and Research Associate, Intelligent Mobility & Software, Teaching and Research Area Mechatronics in Mobile Propulsion, RWTH Aachen University, Germany

11:30 Efficient data replay for AD validation: cutting costs, enhancing speed
Gregor Hordys, Product Manager, Connectivity Automated Driving & Software Solutions, dSPACE GmbH, Germany

12:00 Virtual validation of driving functions along a continuous tool chain
Dr. Michael Kochem, Vice President Strategic Consulting & Engineering, IPG Automotive GmbH, Germany

12:30 Lunch in the exhibition area

14:00 – 15:30

DRIVING FUNCTIONS I
Moderation: Dr. Karl-Heinz Glander, Senior Vice President Global Engineering, NNG, Germany

14:00 The technology of the “AutBus” autonomously driving people- and goods-mover
Armin Engstle, Site Manager AVL Roding, AVL Software and Functions GmbH, Germany

14:30 EDAG CityBot – automated driving control of a multifunctional, autonomous robot vehicle
David Münzing, Portfolio Manager ADAS, EDAG Engineering GmbH, Germany

15:00 The journey to regular operation of a fully automatic terminal tractor at a depot in mixed operation
Rüdiger Meyer, System Designer, ZF CV Systems Hannover GmbH, Germany

15:30 Refreshment break with coffee and tea in the exhibition area

16:00 – 18:00

PERCEPTION I
Moderation: Taner Kandemir, Head of Automated Driving Software Functions, Mercedes-Benz AG, Germany

16:00 Improving 3D object detection for autonomous driving – a case study of data-driven development
Dr. Christopher Pinke, Product Manager Robotaxi, Continental Autonomous Mobility Germany GmbH, Germany

16:30 Multi-object tracking based on imaging radar 3D object detection
Patrick Palmer, Research Assistant, Institute RST, TU Dortmund University [in cooperation with ZF Group], Germany

17:00 Enhancing digital maps with AI-derived confidence information
Dr. Martin Pfeifle, CTO, NNG, Germany

17:30 System for functional hedging of automated and autonomous vehicles in the assembly line
Lennard Margies, Group Manager Automotive Assembly and Production of Alternative Drive Technologies, Zentrum für Mechatronik und Automatisierungstechnik gGmbH, Germany

18:00 End of the 1st day of the conference

19:30 Networking Dinner
08:30 – 10:30

DEVELOPMENT METHODS II

Moderation: Dr. Michael Kochem, Vice President Strategic Consulting & Engineering, IPG Automotive GmbH, Germany

08:30 Generation, integration, and simulation of virtual ECUs in cross-domain E/E architectures
Martin Rühl, Senior Product Manager Software-in-the-Loop Testing, dSPACE GmbH, Germany

09:00 Considering necessities for a system architecture utilizing Linux for safety
Jens Petersohn, Product Manager HPC Operating Systems, Elektrobit Automotive GmbH, Germany

09:30 Start C-ITS in cities now – why waiting is not an option
Maik Bargmann, Development Engineer, IAV GmbH, Germany

10:00 Assistance for complex driving maneuvers based on V2X communication
Dr. Thomas Otto, Group Manager Cooperative Systems, Fraunhofer Institute for Transportation and Infrastructure Systems (IVI), Germany

10:30 Refreshment break with coffee and tea in the exhibition area

11:00 – 12:30

PERZEPTION II

Moderation: Dr. Andreas Teuner, Vice President, ADAS Engineering, ZF Active Safety GmbH, Germany

11:00 Statistical modelling of driving scenarios in road traffic using fleet data of production vehicles
Christian Reichenbächer, PhD Candidate, Mercedes-Benz AG [in cooperation with Eberhard Karls Universität Tübingen], Germany

11:30 How to master the challenges of successfully using ASAM OpenSCENARIO
Simon Terres, Product Manager ADAS/AD, AVL List GmbH, Austria

12:00 Campus FreeCity: mapping the road to smart urban mobility
Jochen Nüßle, Software Engineer, EDAG Engineering GmbH, Germany

12:30 Lunch in the exhibition area

13:30 – 15:30

DRIVING FUNCTIONS II

Moderation: Jan Ackermann, Senior Vice President Automated Driving & ITS TV-A, IAV GmbH, Germany

13:30 Collaborative steering with the driving automation
Dr. Robert Fuchs, ADAS/AD Executive Professional and Head of Systems Innovation Research Department, JTEKT Corporation, Japan

14:00 Cooperative lateral vehicle guidance control for automated vehicles with steer-by-wire systems
Robert Gonschorek, Senior Control Systems Expert – Global Steering Engineering, ZF Automotive Germany GmbH [in cooperation with TU Dortmund University], Germany

14:30 Development and qualitative evaluation of new concepts to promote level-compliant driver behavior
Nuria Brüggemann, Research Associate, Market and Advertising Research, Traffic Psychology, Hochschule der Medien, Germany

15:00 7 levels through the garage: 3D ego localization for L4 automation
Dr. Ralph Grewe, Product Manager Perception – Innovation Line Driverless, Continental Autonomous Mobility Germany GmbH, Germany

15:30 Refreshment break with coffee and tea in the exhibition area

16:00 – 17:00

KEYNOTE LECTURES II

Moderation: Prof. Dr. Prof. h.c. Dr. h.c. Torsten Bertram, Head of the Institute of Control Theory and Systems Engineering (RST), TU Dortmund University, Germany

16:00 From driver assistance to autonomous trucking – how fully autonomous driving systems become reality
Ahmed Irathini, Head of Strategy and Portfolio, Autonomous Mobility Business Area, Continental Autonomous Mobility Germany GmbH, Germany

16:30 Autonomous driving as an enabler for new mobility concepts
Dr. Henning von Watzdorf, CEO, HOLON GmbH, Germany

17:00 Closing remarks
Dr. Alexander Heintzel, Editor-in-Chief ATZ I MTZ Group, Springer Nature, Germany

Eventual program changes reserved
Continental Autonomous Mobility Germany GmbH

Continental develops pioneering technologies and services for sustainable and connected mobility of people and their goods. Founded in 1871, the technology company offers safe, efficient, intelligent and affordable solutions for vehicles, machines, traffic and transportation. In 2023, Continental generated preliminary sales of €41.4 billion and currently employs around 200,000 people in 56 countries and markets.

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EVENT INFORMATION

Registration fee
€ 1,495.– plus VAT

This includes the conference documentation, the catering during breaks and the evening event on 19-03-2024.

Date
19 – 20 March 2024

Venue
House of Logistics and Mobility (HOLM)
Bessie-Coleman-Straße 7
60549 Frankfurt am Main, Germany

Languages used in the presentations
German and English with simultaneous interpreting
(German – English / English – German)

Hotels
Some hotels have room blocks at reduced prices for the participants. You can find more information on the events page of our website.

Further Information and Online Registration:
www.atzlive.de/en/audri

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Organizer

ATZlive / Spotlight on Powertrain and Vehicle Engineering

Our events are firm fixtures in the diaries of automotive engineers and powertrain specialists. We offer a range of innovative conferences on the latest topics in the world of automotive engineering and powertrain technology, from the perspective of research, development, and applications.

Our close collaboration with the editorial teams of our specialist magazines ATZ and MTZ keeps us fully up-to-date on the latest topics and trends on the market.

Springer, with its automotive technology brands in the ATZ and MTZ Group, is part of Springer Nature, one of the world’s leading publishing groups for scientific, educational and specialist literature.

Participants
A conference for decision-makers and experts who
- shape and develop automated driving
- are involved in the cross-cutting topic of V2X
- develop software, algorithms, DevOps, and tools
- are involved in the development of new vehicle and interior concepts at car and commercial vehicle manufacturers, suppliers, and engineering service providers as well as in research and education and at consulting companies and organizations.