4th International VDI Conference

Autonomous Trucks

The Future of Transportation

November 03 and 04, 2020, Munich, Germany

- Horizon 2030: Advanced Truck Technology meets New Business Models
- Digital Transformation and AI's Impact on the Transportation Industry
- Perspectives on Autonomous Trucks in the USA, EU and China
- Autonomous Electric Trucks on Public Roads
- Europe's leading Autonomous Commercial Vehicles Conference

+ Interactive World Café & Start-up Session
+ Panel Discussions with International Industry Experts
+ Workshop: Automation on Private Ground

Meet international Experts from:

An event organized by VDI Wissensforum GmbH
www.vdi-international.com/ 01K0915120
09:00  Registration & Welcome Coffee

10:00  Chair’s Welcome and Opening Address
Dr. Gerhard Nowak, Partner, Bain & Company, Germany

10:15  The Future of Autonomous Trucks
- Autonomous trucks will commercialize before autonomous taxis
- The importance of long-range vision in highway driving
- The role AI plays in autonomy
Chuck Price, Chief Product Officer, TuSimple, USA

I. Horizon 2030: Advanced Truck Technology meets New Business Models

- Readiness of the truck and transport industry to address upcoming opportunities and challenges through digitalization and AVs
- New technologies disrupting existing business models?
- New technologies = new business models = new industry player(s)?
Niklaus H. Waser, Senior Vice President and Chief Digital Officer, MAN Truck & Bus SE, Germany

11:15  Deploying Future of Transport: Autonomous & Electric Transport System
- Road freight transport is unsustainable and inefficient
- Autonomous, electric transport has great potential to reduce emissions, increase efficiency and road safety
- Software and services are the core of a new transport system
- Pragmatic approach to infrastructure, regulation and public acceptance:
  Deployment first in less complex traffic environments, expanding from there
Robert Falck, Founder and CEO, Einride, Sweden

11:45  Bringing the Waymo Driver to Trucking
- Self-driving technology can make trucking stronger, safer and more efficient
- Custom-built sensors & advanced self-driving software developed together under one roof
- Rigorous simulation, closed course, and public road testing in diverse areas
Vijaysai Patnaik, Product Lead Trucking, Waymo, USA

12:15  Lunch

13:15  Interactive World Café
During this session, we invite you to directly engage with other experts in small round table discussions. Identify challenges within your sector as well as problems, needs and solutions. Decide what exactly you would like to discuss and introduce your own experiences and cases.

Exemplary Topics:
- Last Mile Delivery with Autonomous Vans, VanAssist Project
- Challenges of V2X Testing for Automated & Connected Vehicles, Transpolis
- Data Ownership around autonomous vehicles, CYRES

14:30  Networking & Coffee Break

II. Automated Trucks for Transportation and Logistics

15:00  First Autonomous Driving Electric Truck on a Public Road – Warehouse Traffic in Sweden
- Pilot project between DB Schenker and Einride: Objectives & successes
- Closer look at the piloting of the autonomous, electric pod in Jönköping
- Evaluation and Outlook for other international pilot projects
Lisa Brückner, Senior Business Analyst, Deutsche Bahn AG, Germany

15:30  Fleet Management of Automated Guided Vehicles (AGV)
Helen de Wachter, Head of Mobile Assets Europe, BASF

16:00  The Era of U.S. Political Volatility: Corporations at Risk
- The drivers of instability: Social capital decline, growth-crippling government intervention & the discrediting of the elite policy consensus
- The Divided Nations: This volatility combined with the rise of nationalism has made globalism a serious political liability for multinational corporations
Jonathan M. Baron, Principal, Baron Public Affairs LLC, USA

16:30  Panel Discussion: Market Impact and Readiness
Panelists:
Chuck Price, TuSimple, USA
Niklaus H. Waser, MAN Bus & Trucks SE, Germany
Charlie Jatt, Waymo, USA
Robert Falck, Einride, Sweden
Serkan Arslan, NVIDIA, Germany

17:30  End of Conference Day One

Get-together
At the end of the first conference day we kindly invite you to use the relaxed and informal atmosphere for in-depth conversations with other participants and speakers.
III. Safety is Core: Regulation, Verification and Validation

09:15 Race of Jurisdictions: Update on the Legal & Regulatory Framework for AVs in the US, EU and China
- Due to new technologies we need a new legal and regulatory landscape
- Legal and regulatory framework for prototype testing and series deployment
- Strategic role of the legal and regulatory framework for the technology of automated driving
Nico Waegerle, Senior Legal Counsel & Governmental Affairs, ARGO AI, Germany

09:45 Innovative Validation Methodologies Integrated in the V&V Framework
- How to generate the test content with only relevant test cases?
- How to reach highest coverage?
- What validation tools to choose?
Gernot Hasenbichler, Senior Product Manager ADAS / AD Truck & Bus, AVL List GmbH, Austria

10:15 Safely Developing Automated Trucks
- Holistic safety concept for the development of automated trucks
- Early stage technology testing
- Engineering a safe platform for putting a safe and secured truck on the road
- Ensuring operational safety during testing with safety drivers
David Watson, Chief Architect, Embark Trucks, USA

10:45 Networking & Coffee Break

IV. Generating Perception: Sensors and Localization

11:15 3D Maps for Autonomous Trucks
- 3D Maps as a sensor for perception
- Precise localization using High-Definition 3D Maps
- Using 3D Maps as content for simulation in virtual validation
Henning Lategahn, Managing Director, Atlatec GmbH, Germany

11:45 Next Generation Sensors for Autonomous Trucks
- Overview of next generation radar and cameras
- Current developments for new LiDAR sensors
- Capabilities of solid state LiDAR sensors
Thomas Laux, Head of Business Development Advanced LiDAR Solutions, Continental, USA

12:15 Start-up Session
In regards to autonomous trucks and disrupted supply chains, there are many interesting industry newcomers that significantly influence the market. Listen to their presentations and get actively involved in the speed networking session.
Use the chance and present your start-up free of charge!

Confirmed Start-ups:
ANavS, Germany
Blickfeld, Germany
Tracks, Germany
WhatToLabel, Switzerland
XenomatiX, Belgium

12:45 Lunch

V. Cybersecurity and Newest AV Software

13:45 Satellite-based Navigation Cybersecurity: Lessons Learned from Spoofing Experiments
- Overview of GNSS based navigation systems used in trucking
- Regulus' experiments and research on hacking vehicle navigation systems
- Presenting best practices for cybersecurity for trucks
Yoav Zangvil, Chief Technology Officer, Regulus, Israel

14:15 Implementing AI for Self-Driving Trucks
- Current advancements of autonomous vehicle software
- Deep learning, sensor fusion, and surround vision will enable a safe driving experience
- Challenges of validating the performance of autonomous systems for improving road safety
Sergio Amaya, Director Automotive Software, NVIDIA, Sweden

14:45 Panel Discussion: Software and Safety for Autonomous Trucks
Panelists:
David Watson, Embark Trucks, USA
Luca Delgrossi, Volvo, Sweden
Thomas Laux, Continental, USA
Sergio Amaya, NVIDIA, Sweden

15:45 Conference Chair's Closing Remarks

16:00 End of Conference
International VDI Workshop

Automation on Private Ground

Workshop Chair:
Benedikt Fried, Senior Consultant, P3 automotive GmbH, Stuttgart
Marco Dargel, Partner, P3 automotive GmbH, Stuttgart

Date and Venue:
November 05, 2020
Marriott Hotel Munich Airport

Time:
10:00 - 16:00

Content
This workshop introduces the possibilities that are already available today by using automation technologies (including but not limited to automated trucks) on private grounds (fields, yards, mines, harbors, company grounds etc.). Participants will learn that they do not have to wait to generate the advantages based on automated operations. By analyzing own operations on private grounds the participants will learn how to develop an automation project, how to deal with respective challenges and roadblocks during the project realization. The workshop addresses operators and owners of private grounds as well as all innovative first movers from the autonomous driving industry to learn about today’s possibilities and to improve technologies for productive automation use cases.

Agenda

Introduction
• Overview of automated operation on private ground
• Introduction on technologies and infrastructure requirements
• Lessons Learned from first realized automation projects

Breakout Sessions
• Framework for automation projects on private ground
• Design the automation project from user story to service
• Identify challenges and opportunities in automation projects
• Evaluate quick wins, economic advantages and selling points

Discussion and conclusion
• Presentation of results from breakout sessions
• Main findings of the workshop day
• Outlook into the future vision and next steps of “automation on private grounds”
**Exhibition / Sponsoring**

If you want to meet with and reach out to the first-rate experts attending this VDI conference and to powerfully present your products and services to the well-informed community of conference participants, please contact:

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Please submit your topic to:  
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Product Manager International Business  
Phone: +49 211 6214-194  
Email: rothhagen@vdi.de

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**Conference venue**  
München Airport Marriott Hotel  
Alois-Steinecker-Str. 20  
85354 Freising  
Phone: +49 8161/966-0  
Email: muenchen.airport@marriotthotels.com

**Hotel room reservation:** A limited number of rooms has been reserved for the benefit of the conference participants at the München Airport Marriott Hotel. Please refer to “VDI Conference”. For more hotels: www.vdi-wissensforum.de/hrs

**VDI Wissensforum service package:** The conference package includes the conference documents (online), beverages during breaks, lunch and the get-together on November 03, 2020.

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4th International VDI Conference

Autonomous Trucks

Yes, I will participate as follows:

☑ Participation Fee + VAT
   - VDI Conference 03.-04.11.2020 (01KO915120) € 1840
   - Workshop 05.11.2020 (01ST949101) € 950
   - Package Price (Please tick the boxes)
     - (Conference + 1 Workshop) € 2510

☐ I am interested in sponsoring and/or exhibition

☐ Participation Fee VDI-Members* Save 50 € for each Conference Day.
   * For the price category 2, please state your VDI membership number

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Please register at www.vdi-international.com. Your credit card information will be transmitted encrypted to guarantee the security of your data.