The World’s Largest Congress for Automotive Electronics, Software and Applications!

21st International Congress and Exhibition

October 18-19, 2023, Bonn, Germany

Top Speakers:
Kai Lars Barbehön, BMW
Dr. Frank Kindermann, NIO
Magnus Östberg, Mercedes-Benz
Mathias Pillin, Bosch
Igal Raichelgauz, Autobrains
Maria Uvarova, Stellantis
Dr.-Ing. Yankin Tanurhan, Synopsys
Dominik Wee, Microsoft
Dr. Rolf Zöller, Porsche & Porsche Digital

Main Topics:
- Open Source Software
- Software Technologies
- E/E-Architecture
- Automotive AI
- Automated Driving
- Security
- Electronics Technology
- E-Vehicle Mobility
- System Engineering and Processes

Congress Highlights:
- Automotive Trend Session: Open Source
- Panel Discussion: Transformation of Working Environment
- Parallel Conference E/E Commercial Vehicles
- Start-up Area and Special Start-up Program
- Extensive Exhibition
- Interactive Communication Points
- Meet with the Speakers
- Night of Electronics

Including up-to-date contributions from:

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ELIV – Program Overview

1st Congress Day
Wednesday, October 18, 2023

07:45 Registration

Plenary Speeches – New York (Ground Floor)
Moderation: Dr. Rolf Zöller, Porsche AG und Porsche Digital, Weissach

08:45 Opening of the Congress, Current Market Situation & Hour of Topical Interest
Dr. Rolf Zöller, Director E/E Smart Connected Vehicle Porsche AG and Managing Director Porsche Digital, Chairman of the Program Committee and Dr. Karl-Thomas Neumann, former CEO of Continental AG, Volkswagen China and Adam Opel GmbH, Founder & Owner

09:10 Transforming the Future of Mobility with the Power of AI and the Cloud
Dominik Wee, Corporate Vice President – Manufacturing & Mobility, Sales, Business Strategy & Development, Microsoft Corporation, Munich

09:40 NIO – Smart Electric Vehicles and Battery Swapping
Dr. Frank Kindermann, Head of Battery System Europe, NIO GmbH, Munich

10:10 Re-Thinking E/E Architecture Design – A More Comprehensive Approach to Solve Future Challenges
Dipl.-Ing. Kai Lars Barbehön, Vice President Central Control Units, Wire Harness, Power Supply, BMW Group, Munich

10:40 Coffee break, Exhibition and Start-up Area visit

11:25 Parallel Sessions

Session 1: New York (Ground Floor)
Software – Open Source
Moderation: Dipl.-Ing. Uwe Michael, mps, Rödermark

Automated Driving – Systems
Moderation: Dr. Torsten Wey, Ford, Cologne

Electronics Technology
Moderation: Ralf Lenniger, Former Continental, Regensburg

Session 2: Nairobi (Ground Floor)
Automated Driving – Systems
Moderation: Jürgen Bortolazzi, Porsche AG, Weissach

Vehicle Architecture – Strategy
Moderation: Dr. Joachim Schlosser, Elektrobit Automotive GmbH, Munich

Session 3: Wien (Ground Floor)
Software – Automotive Trend
Moderation: Dipl.-Inf. Elmar Frickenstein, Elstein Consulting & former BMW AG, Munich

Automated Driving – Sensors
Moderation: Jürgen Bortolazzi, Porsche AG, Weissach

Vehicle Architecture – Aspects
Moderation: Dipl.-Ing. Stefan Teuchert, MAN Truck & Bus, Munich

Session 4: Bangkok (Basement)
E-Vehicle Mobility – System
Moderation: Dr.-Ing. Dieter Rödder, Robert Bosch, Stuttgart

Future of Transportation
Moderation: Jörg Lützner, Continental Automotive GmbH, Schwalbach

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Electronics Technology
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Vehicle Architecture – Aspects
Moderation: Dipl.-Ing. Stefan Teuchert, MAN Truck & Bus, Munich

18:40 End of the first Congress Day

19:00 Night of Electronics on the MS RheinEnergie
All participants are cordially invited. Discuss the results of the day with fellow experts and use your chance to network.

Register at: www.eliv-congress.com
2nd Congress Day
Thursday, October 19, 2023

08:30 Parallel Sessions
Session 1: New York (Ground Floor)
Software
Moderation: Dr. Riclef Schmidt-Clausen, CARIAD SE, Ingolstadt

Session 2: Nairobi (Ground Floor)
Automotive AI – Applications
Moderation: Kay Talmi, HELLA GmbH & Co. KGaA, Berlin

Session 3: Wien (Ground Floor)
System Engineering and Processes
Moderation: Dr. Thorsten Huck, Robert Bosch GmbH, Albstatt

Session 4: Bangkok (Basement)
Security - Vulnerabilities
Moderation: Dipl.-Ing. Martin Schleicher, Continental, Erlangen

Conference CV: Addis Abeba (Basement)

10:00 MB.OS – Our Chip-to-Cloud Architecture for a Luxury Experience
Magnus Östberg, Chief Software Officer – Executive Vice President, Research & Development, Mercedes-Benz AG, Sindelfingen

10:30 Building a Car while driving it: incremental Approach to Cockpit Software
Maria Uvarova, PhD, Senior Vice President, Software Product Management, Stellantis, Munich

11:00 Coffee break, Exhibition and Start-up Area visit

11:45 Parallel Sessions
Panel Discussion: Transformation of working environment
Moderation: Claudia Burger, Editor and Ken Fouhy, CEO/Editor in Chief, both of VDI Verlag GmbH/VDI Nachrichten, Düsseldorf

Software – Cloud & Data
Moderation: Dipl.-Ing. Stefan Singer, Renesas Electronics, Munich

System Engineering and Processes
Moderation: Dr.-Ing. Dieter Rödder, Robert Bosch, Stuttgart

Security – Challenges
Moderation: Dipl.-Ing. Henning Harbs, Volkswagen AG, Wolfsburg

Components, Subsystems & Integration
Moderation: Dr. Falk Hecker, Knorr-Bremse Systeme fuer Nutzfahrzeuge GmbH, Schwieberdingen

13:15 Lunch break, Exhibition and Start-up Area visit

Plenary Speeches and Award Ceremony – New York (Ground Floor)
Moderation: Dr. Rolf Zöller, Porsche AG und Porsche Digital, Weissach

14:30 Liquid AI – Closing the Gaps toward Autonomous Driving
Igal Raichelgauz, B. Sc., Founder & CEO, Autobrains Technologies Ltd., Tel Aviv-Yafo, Israel

15:00 Semiconductors Are Driving Sensing and Thinking
Dr.-Ing. Yankin Tanurhan, Senior Vice President of Engineering, Solutions Group, Synopsys, Inc., Sunnyvale, CA, USA

15:30 Conclusion and Discussion
By Members of the Program Committee

16:00 Award Ceremony “Auto Electronic Excellence Award 2023”, best Start-up and Closing of the Congress

16:15 End of the Congress
1st Congress Day

Wednesday, October 18, 2023

07:45 Registration

Plenary Speeches – New York (Ground Floor)

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09:10 Transforming the Future of Mobility with the Power of AI and the Cloud

- Unlocking new business models, increasing efficiencies, creating new monetization opportunities using the power of AI and cloud computing
- Accelerating innovation in the software-defined and autonomous vehicle space
- Opening up new opportunities with the industrial metaverse

Dominik Wee, Corporate Vice President – Manufacturing & Mobility, Sales, Business Strategy & Development, Microsoft Corporation, Munich

09:40 NIO – Smart Electric Vehicles and Battery Swapping – Smart EVs: next generation of BEV

- Battery Swapping: fully recharged within less than 5 minutes
- User Centric: aiming for the highest User satisfaction
- Driven by Design: a premium car

Dr. Frank Kindermann, Head of Battery System Europe, NIO GmbH, Munich

10:10 Re-Thinking E/E Architecture Design – A More Comprehensive Approach to Solve Future Challenges

- Automotive E/E architectures are significantly shaped by the top trends of digitalization
- Today's prevailing domain oriented E/E architectures result in hardly manageable functional interdependencies
- Zonal physical electrical power system architectures in combination with high-performance integration platforms will lead into the future
- Why and how BMW derives the central E/E infrastructure for the BMW NEW CLASS from a new, holistic E/E architecture approach

Dipl.-Ing. Kai Lars Barbehön, Vice President Central Control Units, Wire Harness, Power Supply, BMW Group, Munich

10:40 Coffee break, Exhibition and Start-up Area visit

Simply download the Event-App and register!

The App will be available for download in the Apple App Store and the Google Play Store for all participants as of October.

App areas:
- Digital congress program: create your own agenda at once
- General event information
- Evaluation and question function
- Exhibition information
- Service information

Networking:
- Digital Business Card: create your Digital Business Card. Share your data quickly and easily with other participants and save new contacts directly
- Use the "Offer" and "Search" function to find and contact other participants
- Meeting Arrangement: request appointments with other participants

Register at: www.eliv-congress.com
11:25 Why Open Source – A New Generation Perspective
- The role of Open Source in the field of web technologies
- Advantages of an organization using Open Source
- Active contributions are essential to leverage the full potential of Open Source

Patrick Böder, Senior Software Engineer and Open Source, Porsche Digital, Ludwigsburg

11:35 The Open Road Runs on Open Source
- Vision of software-defined vehicle requires accelerated pace of innovation
- Open source has been a driver of innovation in multiple industries
- Open source has been a driver of innovation in multiple industries
- Success factors: Open collaboration, cloud-native platform, functional safety certified base layer infrastructure
- Solution must cover entire vehicle life cycle

Francis Chow, VP & GM, In-vehicle Operating System and Edge, Red Hat, Inc., Sunnyvale, CA, USA

11:55 AUTOSAR Software Architecture – A Cornerstone for Software Defined Vehicles and the Future of Mobility
- Strategic Vision
- Cooperations with other consortia
- Vehicle API approach


11:55 Criticality Driven Data Acquisition in Autonomous Driving – A Basis for Completeness and Safety Argumentation
- Method developed in VVMethods
- Basis for ISO21448 SOTIF validation
- Efficient data acquisition in automated driving
- Smart Data analytics in automated driving

Dipl.-Ing. (FH) Max Nestoriuc, Team-leader ADAS Systemdesign & Validation, Co-authors: Himanshu Walia, M. Sc., both of AVL Deutschland GmbH, Stuttgart, Dipl.-Ing. Thomas Guntstchnig, AVL List Gmbh, Graz, Austria

11:55 Estimation of Body Height, Weight, and Gender of Vehicle Occupants Using Machine Learning
- Deep Learning
- Vehicle Occupant Monitoring
- Feature Estimation

Patrick Laufer, M. Sc., Development Engineer, Vehicle Safety, IAV Fahrzeugsicherheit GmbH & Co. KG, Munich

11:55 Vehicle-to-Vehicle (V2V) Communication as Enabler for Improved Automated Driving Functions
- Connection to EU-funded project
- Description of the enabler
- Description of use case and its test and verification

Dipl.-Ing. (FH) Markus Kremer, System Architect ADAS/AD, FEV.io GmbH, Aachen

11:55 Active Noise Control: Helping Carmakers Design Better Cars
- Overview of Road Noise Control technology
- Vehicle Design Compromises-cost, mass, complexity, ride quality, noise quality
- Analysis of selected mechanical versus electronic noise control problems
- Summary of RNC advantages for carmakers

Dr. John Feng, Head of Active Sound Management, Automotive Division, Bose Corporation, Framingham, MA, USA

11:55 Safe and Efficient Regenerative Braking Strategies for Heavy BEVs
- Regenerative braking of heavy articulated vehicles
- Model based brake force limitation
- Wheel Slip Control

Leon Henderson, PhD, Function Developer, Vehicle Motion Management and Johan Hansson, M. Sc., Function Developer, Vehicle Technology, Co-authors: Daniel Möller, Maliheh Sadeghi Kati, all of Volvo GT, Gothenburg, Sweden

11:55 A Holistic Approach for Designing a Battery Electric Vehicle Thermal Management System
- Virtual testing of entire vehicle in a single simulation environment
- Explore design space to refine component and system requirements
- Develop an electrothermal model of battery pack capturing individual cell behavior
- Assess impact of powertrain and cooling system designs on overall performance


Welcome to the Era of Logistics – Insights into Trends That Will Shape the Future
- Megatrends shaping the needs of societies and industries and the supply chains that serve them
- Navigating the future: The DHL Logistics Trends Radar - what is it, why it matters and how it supports innovation
- The DHL customer-centric innovation approach and ecosystem
- Use case examples, ideas for innovation and implementation leveraging technology as well as business and social trends

Dr. Klaus Dohrmann, Vice President, Head of Innovation & Trend Research, DHL, Troisdorf

Conference CV: Addis Abeba (Basement)

Future of Transportation
Moderation: Jörg Lützner, Continental Automotive GmbH, Schwabach
1st Congress Day

12:25
- Perspectives on Software-defined Vehicle from a non-automotive company
  - Current state of Open Source Software
  - Challenges of building an Open Source Ecosystem
  - Eclipse Software-defined Vehicle: Overview & Current Status
  - Success factors from a Microsoft perspective
  Boris Engel, Program Director Automotive, Microsoft Deutschland GmbH, Munich

12:35 Overview funding projects in the context of Automotive Open Source
Prof. Dr.-Ing. Habil. Alois Knoll,
Chair of Robotic, Artificial Intelligence and Embedded Systems, Technical University of Munich

12:55 Lunch break, Exhibition and Start-up Area visit

14:25 Building an Open-Source Ecosystem
for Software-defined Vehicles –
The Good, The Bad, and the Ugly
- Perspectives on Software-defined Vehicle from a non-automotive company
  - Current state of Open Source Software
  - Challenges of building an Open Source Ecosystem
  - Eclipse Software-defined Vehicle: Overview & Current Status
  - Success factors from a Microsoft perspective
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Automated Driving – Sensors
Moderation: Jürgen Bortolazzi,
Porsche AG, Weissach

Using Radar + Vision Fusion for Improved Low-light Pedestrian Detection
- Combining vision and radar in difficult situations to securely detect pedestrians
  - Overall architecture and distribution between edge and central compute for high compute efficiency
  - Using multi-static radar operation for highest point cloud density
  - Showcase pedestrian and bicycle detection in real traffic situations
  Dr. Peter Gulden, SVP of Radar Systems and Software, Co-author: Dr. Zorawar Bassi, both of indie Semiconductor, San Jose, CA, USA

Vehicle Architecture – Strategy
Moderation: Dr. Joachim Schlosser,
Elektrobit Automotive GmbH, Munich

Scalable Plug & Play High-Performance Computer and Fluid Cooling Solutions
- Flexible and scalable High-Performance Computer concept for any vehicle architecture
  - Innovative “plug & play” fluid cooling solution for zero gap heat transfer
  - Flexible cooling pad allows a maximum of flexibility for OEMs
  Dipl.-Ing. Andreas Heise, Head of ADCU Technology, Principal Expert Mechatronic Technologies, Continental AG, Eschborn

E Vehicle Mobility – Strategy
Moderation: Dipl.-Ing. Christof Kellerwessel, Former Ford, Cologne

How to Improve EV Battery Cell Quality
- Identify key challenges and industry trends for battery cell production
  - Learn about cutting edge test and inspection techniques (EIS, ACIR, scientific machine learning)
  - Get insights to optimize cell testing during production to improve yield, quality, and throughput
  - Hear about today’s industry use cases such as the Battery Innovation Center
  Davide Cotterle, Senior Application Engineer, Transportation Business Unit, Nl (National Instruments), Munich

Technological Innovations Enabling the Scalable Deployment of Autonomous Driving for Heavy Trucks
- How autonomy will transform the trucking industry
  - Market opportunity for highly automated driving (HAD) products
  - Plus’s case study of building and commercializing high-performance modular autonomous driving software solutions that are affordable and scalable across vehicle types and applications
  - Plus’s state-of-the-art data-driven system for continuous learning with minimal human intervention
  Anurag Ganguli, PhD, Vice President of R&D, Plus, Santa Clara, CA, USA

New Opportunities with Software-Defined Lighting – Personalization and Emotionalization of Vehicle
- Software Defined Lighting
  - Established signal functions in a new appearance
  - Experience the vehicle by light
  - EE architecture for Software Defined Lighting
  Dr. Carsten Wilks, Head of Innovation Lighting Electronics, Co-authors: Dr. J. Roslak, both of Hella KGaA Hueck & Co., Lippstadt

A Cloud-based Self-Learning Digital Twin Solution for Increasingly Accurate Range Prediction in Battery Electric Vehicles
- Data-driven function development
  - Framework for self-learning data-driven digital twin model
  - Load profile prediction based on destination forecast, vehicle resistance information and speed profile prediction
  Dr.-Ing. Marius Wegener, Team Leader Controls, E-Mobility Systems, Co-authors: Dr.-Ing., Rene, Savelberg, both of FEV Europe GmbH, Aachen, Lukas Schäfers, M. Sc., RWTH Aachen University

Outlook on J1939 with CAN XL
- Higher transmission rates with CAN FD (J1939-22)
- Usage of the Multi-PG concept
- Outlook on J1939 with CAN XL

Timo Schwendner, Solution Manager J1939, Productline Embedded Software and Systems, Co-author: Martin Schlotter, both of Vector Informatik GmbH, Stuttgart

Register at: www.eliv-congress.com
Automotive Radar Technology Innovations Power Next-gen ADAS and Autonomous Driving
- 28nm RFCMOS single-chip Radar integration
- High-resolution 4D Imaging Radar technology
- Next-generation vehicle architectures – enabling new Radar capabilities
Mathias Feulner, Senior Director Marketing, ADAS, NXP Semiconductors Germany GmbH, Munich

Combining SD Maps and ADAS Perception for Advanced Augmented Reality Guidance
- Overall In-car Augmented Reality Architecture
- Using Navigation and ADAS Perception input for Augmented Reality
- Situation Analysis
- 3D Scene Creation
Dr. Martin Pfeifle, CTO, NNG Kft., Budapest, Hungary, Co-authors: Prof. Dr.-Ing. Niclas Zeller, Hochschule Karlsruhe, Dr. Andreas vom Felde, StradVision, Munich

Towards the Next Step in Vehicle E/E Architectures
- Path towards future software-defined vehicle E/E architectures
- Technology enablers such as cross-domain integration platforms
- Focus on cost-efficient and scalable solutions shaping future E/E designs
Dr. Thorsten Huck, Vice President Competence Center E/E Architectures, Co-author: Dr. Andreas Achtzehn, both of Robert Bosch GmbH, Abstatt

Strategically Migrating, Mapping and Scaling Software to New SoC, Domain & Zone Architectures and HPC
- Timing, Performance and Event Chains
- Mapping & software to new hardware
- Exploring architecture variants
Dr. Ralf Münzenberger, CEO, Co-author: Olaf Schmidt, both of INCHRON AG, Erlangen

Analysis of WBG Based Hybrid Semiconductors Approach for Bidirectional PFC in On-Board Charger Applications
- On board charger
- Wide band gap devices
- PFC
- Car electrification
Dr.-Ing. Domenico Nardo, Power Specialist for automotive applications, Technical Marketing, Co-authors: Francesco Gennaro, Giuseppe Aiello, all of STMicroelectronics GmbH, Aschheim

Event-Chain-Focused Development of System Architectures Makes Complex Systems Manageable
- End-to-end validation of real-time requirements in vehicle systems
- Event chain analysis for higher-level timing requirements
- Early error detection improves project planning security
- Development productivity can be significantly increased
Dipl.-Ing. Ferry Kraft, Function Architect, R&D Electric/Electronic, MAN Truck & Bus SE, Munich and Dipl.-Ing. Florian Mayer, Project Manager, Professional Services, Co-authors: Jan Apelt, Dr.-Ing. Ralf Münzenberger, all of INCHRON AG, Erlangen, Christian Winkler, MAN Truck & Bus SE, Munich

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1st Congress Day

15:55 Panel Discussion on "Open source"
Moderation: Elmar Frickenstein, Elstein Consulting & former BMW AG
Panelists: Francis Chow, Red Hat
Michael Plagge, Eclipse
Boris Engel, Microsoft
Robert Day, Arm
Christian Salzmann, BMW

16:25 Coffee break, Exhibition and Start-up Area visit

17:10 What It Really Takes to Empower Software Defined Vehicles
• The industry’s journey to bring truly software-defined vehicles at scale to the roads
• Key levers: decoupling hardware and software at decisive points in the vehicle architecture, data-driven development and operations, scalable service architectures
• Tangible contributions a software-driven Tier 1 can bring to the industry
Dr. Mathias Pillin, Member of the Business Sector Board Bosch Mobility Solutions, Head of Mobility Technology, Gerlingen

15:45 Development and Testing Autonomous Vehicles (AV) at Scale
• Data at scale for hybrid cloud infrastructures for smart AD data logging and processing
• Linear scalability of performance with optimized costs
• Lower cost of infrastructure from edge to cloud, by avoiding the need to store the data across multiple locations
• Based on open source and secure standards to maintain a single source of truth
• Data management and data orchestration, scalable based on the containerized applications
Dipl.-Ing. Frank Kraemer, System Architect, Technical Presales, IBM, Frankfurt am Main

15:55 Mastering Complexity in Modern Vehicle Software Updates
• Software dependency model as interface between engineering and after sales
• Unifying over-the-air-updates and workshop operations
• Tracing software updates for UNECE SUMS
• Detecting and handling invalid vehicle states
Dr. rer. nat. Oliver Meyer, Head of Department, System Development Lifecycle Management & After Sales, Co-author: Dr. rer. nat. Boris Böhlen, both of DSA Daten- und Systemtechnik GmbH, Aachen

16:25 Multi-Level GaN Inverter – Development of HV Solutions for Highest EV Performance and Efficiency
• Benefits include higher voltages, reduced harmonic losses, and improved NVH characteristics and EMC behavior
• GaN components show additional superior influence on systems over traditional silicon applications
• New ways to improve e-motor efficiency and reduce losses in the WLTP drive cycle by 25 %
Lukas Roslaniec, PhD, Department Leader & Engineer, Power Electronics, Co-author: Thomas Hackl, both of hofer powertrain, Nürtingen

17:10 Automotive AI – Innovations
Moderation: Kai-Uwe Balszuweit, BMW Group, Munich

How to Become a Leader By Development of AI: ChatGPT Research Papers Analyzed
• AI can facilitate fascinating things.
• The development methodology from ChatGPT reveals important learnings about successful AI development.
• These learnings can be well transferred to automotive use cases.
• If the learnings are followed, automotive can be successful with AI
Dr. Ulrich Bodenhausen, Manager Consulting, Product Group Consulting, Vector Consulting Services GmbH, Stuttgart

Continuous System Architecture Development for Automated Driving Features
• Agile development processes and methods applied to Model-based Systems Engineering
• Continuous, parallelized system architecture development with SysML and CI/CD
• Toolchain to automate model quality assurance, configuration and integration
Anuj Malvankar, M. Sc., Team Leader, Systems Engineering Processes, Co-authors: Stephan Riediger, Vijay Konenki, all of FEV.io GmbH, Aachen

15:45 Connectivity
Moderation: Dr.-Ing. Michael Winkler, HELLa Fahrzeugkomponenten, Bremen

Achieving Ubiquitous Connectivity for Future Vehicles
• In-vehicle 5G mmWAVE helps to solve the capacity issue for V2N & V2X
• Non-terrestrial-networks (NTN) complement the cellular terrestrial-networks (TN) to close the existing coverage gap, starting with 5G Rel. 17, further enhancements in 5G advanced and towards 6G
• The digital in-vehicle connectivity architecture supports the integration of 5G mmWAVE and e.g. Satellite Broadband Communication
Dipl.-Ing. Thomas Hinzmann, Lead Technologist, Strategy & Innovation, Connected Mobility Solutions, Co-author: Dipl.-Ing. Dietmar Schnepf, both of Molex CVS Bochum GmbH, Bochum

17:10 Autonomous Driving
Moderation: Dr. Gerhard Nowak, ifp consulting, Munich

Unlocking the Power of Automated Driving Technology Today
• How autonomy will transform the trucking industry
• Market opportunity for highly automated driving (HAD) products
• Plus’s unique approach to empowering driver-in and fully autonomous solutions via Open Autonomy Platform
• Plus’s case study of building and commercializing high-performance modular autonomous driving software solutions that are affordable and scalable across vehicle types and applications
Sun-Mi Choi, MBA, VP of Business Development, Plus, Santa Clara, CA, USA

Register at: www.eliv-congress.com
17:40 The Digital, Connected, Software-Driven Future of Automotive
- Digital transformation of automotive driven by electrification, autonomy
- Changing vehicle architectures as cars become increasingly software-defined
- Smart, connected cars of the future require new digital technology like cloud connected services, advanced driver assistance systems, and customized in-vehicle infotainment
- AI and wireless technologies will support evolving transportation trends

Thomas Dannemann, Senior Director Product Marketing, Qualcomm CDMA Technologies GmbH, Munich

18:10 Maintaining Open-Source Based Software or What Is the True Cost of Free?
- Regulations like UNECE R 156 and ISO/SAE 21434 mandating long periods of fixes and updates
- Need for car manufacturers to take a proactive approach to software maintenance and support
- Problems and possible solutions associated with open-source components and platforms in the automotive industry

Dr. Joachim Schlosser, Senior Manager, Strategic Consulting, Co-author: Jens Petersohn, both of Elektrobit Automotive GmbH, Munich

18:40 End of the 1st Congress Day

19:00 Night of Electronics on the MS RheinEnergie

The VDI invites all participants, sponsors, and exhibitors to join the “Night of Electronics” aboard Europe’s largest event liner, the MS Rheinenergie. This evening reception is the perfect opportunity to network and continue the discussions of the first congress day in a relaxed atmosphere. Meet your peers and business partners and enjoy a varied entertainment program.

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2nd Congress Day

New York (Ground Floor)

Software
Moderation: Dr. Riclaf Schmidt-Clausen, CARIAD SE, Ingolstadt

08:30
Transcending Physical Time – Accurate Simulation of Novel HW/SW-Decoupled Systems
- Despite all attempts to create hardware abstraction layers, automotive software is often tightly coupled to HW timing behavior
- Next generation middleware can help decouple timing dependencies from functional code
- We get more robust code with higher portability across HW generations and vendors
- We can build highly accurate test feedback loops without perfect HW simulators

Christian Uebber, CTO, Engineering, ETAS GmbH, Stuttgart, Co-authors: Dr. Karsten Muehlmann, Dr.-Ing. Philipp Mundhenk, both of Robert Bosch GmbH, Stuttgart

Automotive AI – Applications
Moderation: Kay Talmi, HELLA GmbH & Co. KGaA, Berlin

AI-Based Energy Management of Next Generation Architectures
- New power distribution concept in the upcoming Server-Zone E/E architecture
- Investigation in different Electrical and Electronic (E/E) structures, and evaluate their advantages, features, and potentials
- Division of responsibilities between the server and different zones improved using machine learning or artificial intelligence

Dr. Lin Li, Expert Software & Functions Engineer, Vehicle Control Unit Systems and Functions, Co-authors: Thomas Zipper, Dipl.-Ing. Martin Schlecker, all of AVL Software and Functions GmbH, Regensburg

System Engineering and Processes
Moderation: Dr. Thorsten Huck, Robert Bosch GmbH, Abstatt

Virtual Homologation (UNECE R 155/156/157) – New Opportunities for the Automotive Industry to Enable More Efficient Development Processes and Improving Safety and Quality of Vehicles for High Scaling Software Updates Based on Current and Future Architectures
- Number of homologation relevant software updates will explode in near future
- New approaches for homologation/ type approval are required in order to fulfill customer expectations and in compliance with legal authorities and OEMs product roadmaps
- Partnerships between legal authorities, certifiers, OEMs and technology companies

Dipl.-Ing. Robert Lokner, MBA, Director Automotive, Automotive Industry, Microsoft Corporation, Munich and Dipl.-Ing. Alexander Kraus, CTO, Mobility Division, TÜV SUD Auto Service GmbH, Munich

System Security and Cybersecurity
Moderation: Dipl.-Ing. Martin Schleicher, Continental, Erlangen

Automotive Software Vulnerabilities: Strategies for Early Detection, Mitigation, and Prevention in the Software-Development-Lifecycle
- Root causes of automotive software vulnerabilities
- Most common weakness classes of automotive software vulnerabilities
- Testing methodologies for detecting vulnerabilities
- Preventing most vulnerabilities during development

Dr.-Ing. Andreas Weichslgartner, Senior Technical Security Engineer, Architecture, Security & Technologies, CARIAD SE, Nuremberg

Bangkok (Basement)

Conference CV: Addis Abeba (Basement)

Propulsion
Moderation: Dipl.-Ing. (FH) Stefan Riegl, MAN Truck & Bus SE, Munich

Electrified Commercial Vehicle Trailers – How to Turn a Conventional Trailer into a Hybrid Vehicle
- Electrification/hybridisation of heavy duty trailers
- Decarbonisation of commercial vehicle transport

Dr. Nils Pfuhlmann, Team leader System Solutions Trailer, ZF Friedrichshafen AG, Hannover

Hydrogen – A Game Changer in the Automotive Industry ... and Beyond
- H2 market and potentials
- The road to net zero: H2 as preferred solution?
- Bosch’s Contribution in mobile applications
- ...and beyond (stationary applications)

Dr. Silke Spitzer, Senior Vice President SW Engineering Powertrain Solutions – Electronic Controls, Robert Bosch GmbH, Plochingen

Conference CV: Addis Abeba (Basement)

Register at: www.eliv-congress.com

Thursday, October 19, 2023
09:30  Automotive OS Reloaded – Refocus and Reality Check
- The three big promises of the SW defined vehicle – are we on track?
- Tectonic shifts: The Automotive Landscape is changing fast
- Breaking the Gordian Knot for Scalable SW Platforms
- Imperatives beyond 2023
Dr. Dipl.-Phys. Dipl.-Math. Christof Horn, Head of Automotive Europe Industry X, Industry & Transformation, Accenture, Kronberg

09:45  Validation and Interpretation of Neural Networks: DNN-Based Object Detector as an Example
- Use-case study and hands-on experience of AI validation
- Extend Explainable AI to complex architectures such as an Object Detector
- A two-stage approach for AI validation and interpretation
Dr.-Ing. XinXing Wang, Team Manager Systems and Sensors Validation, Electronics & Virtual Testing Solutions, Bertrandt Group, subsidiary Ingolstadt and Dr. Khalian Chung, Product Owner AI Testing, Vector Informatik GmbH, Karlsruhe

10:00  MB.OS – Our Chip-to-Cloud Architecture for a Luxury Experience
- Why designing an own architecture
- Mercedes-Benz Operating System – separation of software and hardware
- Global footprint and continuous integration
- Outlook – what’s next
Magnus Östberg, Chief Software Officer – Executive Vice President, Research & Development, Mercedes-Benz AG, Sindelfingen

10:15  Building a Car while driving it: incremental Approach to Cockpit Software
- Over-the-air updates permit automotive manufacturers to review their approach to building software
- Customer-first principles in designing cockpit software
- Embedded data analytics and AI as main tools to continuously improve customer experience
Maria Uvarova, PhD, Senior Vice President, Software Product Management, Stellantis, Munich

11:00  Coffee break, Exhibition and Start-Up Area visit

Panel Discussion

Software – Cloud & Data
Moderation: Dipl.-Ing. Stefan Singer, Renesas Electronics, Munich

Sustainable Software Development for Cloud-Native Vehicles
- Standardization of Vehicle APIs cross the Automotive Industry
- Creating open Eco Systems like Machines, Devices, Applications and DevOps
- Defining the next generation of Zonal Architectures to realize the SDV

System Engineering and Processes
Moderation: Dr.-Ing. Dieter Rödder, Robert Bosch, Stuttgart

Challenges in the Synchronous Development of Software, Hardware and Mechanics for Drive Systems
- Challenges due to different development processes of software, hardware and mechanics
- New holistic development process based on systems engineering
- Future possibilities using Big Data, AI and virtual development methods

Why Trusted Execution Environments are Critical for Automotive Security
- Introduction to Trusted Execution Environments
- Common Automotive Use Cases
- Future Use Cases to support Software Defined Vehicles
Andrew Till, B.A., General Manager Secure Platform, Executive Team, Trustonic Limited, Cambridge, United Kingdom

11:45  A Leap in Innovation? – What European OEMs Can Learn from Chinese OEMs in Terms of User Experience
- History of Chinese OEM brands and their arrival on the European market
- Development and latest advancements of Chinese vehicles
- What European OEMs can learn from their Chinese counterparts and how Chinese OEMs can succeed in Europe
Audrey Matarage, Independent consultant, Audrey Matarage Consulting, Stuttgart

11:50  Security – Challenges
Moderation: Dipl.-Ing. Henning Harbs, Volkswagen AG, Wolfsburg

Tales from an Automotive Penetration Testing Team
- Automotive Cyber Security
- ECU Zero-day vulnerabilities
- Security aware automotive development
Itay Lidovski, Security Researcher, Consulting and Research, Co-author: Amit Geynis, both of Argus Cyber Security, Ramat-Gan, Israel

12:00  Why Trusted Execution Environments are Critical for Automotive Security
- Introduction to Trusted Execution Environments
- Common Automotive Use Cases
- Future Use Cases to support Software Defined Vehicles
Andrew Till, B.A., General Manager Secure Platform, Executive Team, Trustonic Limited, Cambridge, United Kingdom

Components, Subsystems & Integration
Moderation: Dr. Falk Hecker, Knorr-Bremse Systeme fuer Nutzfahrzeuge GmbH, Schwieberdingen

Modular High-Power-DCDC-Platform for FC-Applications – The sixth Generation Bidirectional DCDC
- A challenge accepted: steady state and highly dynamic operation at the same time
- Modular approach for scalability and cost-efficiency
- Flexible design for a wide range of applications and markets
Dr.-Ing. Bernhard Budaker, Vice President, Product Division PE, BRUSA HyPower AG, Buchs, Switzerland

AWARD project
- Project presentation
- Hub to hub use case
- Forklift use case
- Port use case
Julien Collier, M. Sc., Project Manager, System, Easy Mile, Toulouse, France

09:30  Master Algorithm for Event-based Co-Simulation with FMI 3.0 for Timing Accurate Software-in-the-Loop
- Master Algorithm for discrete event driven co-simulation
- Simulation of FMI 3.0 FMUs with Event mode
- Clock Based synchronization of FMUs at events
- Timing Accurate Software-in-the-loop

Mythreya Vinnakota, Researcher, Regional Digital Technologies, Bosch Global Software Technologies PVT LTD, Bengaluru, India, Co-authors: Dr. Oliver Kotte, Dr. Laura Beermann, Robert Bosch GmbH, Renningen
2nd Congress Day

12:15 Panel Discussion: Transformation of Working Environment
Panelists:
- Rui Cordeiro, M. Sc., CEO, Critical TechWorks, Porto, Portugal
- Sebastian Dörner, Software Engineering Community Advocate, People & Culture, Porsche Digital GmbH, Ludwigsburg
- Andreas Heim, VP of Design, Process and Technology Engineering, Automotive Business Group, Flex, Stuttgart
- Joe Justice, Chair of the Board of Directors, Agile Business Institute, Tokyo, Japan
- Joachim Langenwalter, Senior Vice President Autonomous Driving, Autobrains AI Technologies GmbH, Berlin
- Martin Schleicher, Head of Software Strategy, Continental AG, Erlangen

Moderation: Claudia Burger, Editor and Ken Fouhy, CEO/Editor in Chief, both of VDI Verlag GmbH/VDI Nachrichten, Düsseldorf

12:45 Rust for Automotive: A Modern, Memory-Safe and Secure Programming Language
- Rust programming language on the rise for automotive and industrial applications
- Rust for embedded applications
- Rust compiler support for Infineon AURIX: Challenges, solution & benefits
Dipl.-Ing. Mario Cupelli, CTO, HighTec EDV-Systeme GmbH, Saarbrücken

A Review of using Artificial Intelligence in Large Projects for Requirements Classification
- Distributing requirements in large projects to ~30 teams
- Using state-of-the-art transformer AI models
- Review of EU regulations and Bosch principles using AI for this purpose
Dr.-Ing. Lutz Trautmann, Group leader for SW and System Architecture and Requirements Management, Cross-Domain Computing Solutions, Robert Bosch GmbH, Hildesheim, Co-authors: Hamza Ghezali, Technical University of Clausthal, Steffen Wittke, Robert Bosch GmbH, Hildesheim, Prof. Dr. Steffen Herbold, all of University of Passau

Software Defined Vehicle: Combining Real-Time Safety Critical Functions with Cloud Connectivity
- The importance of the right choice of RTOS and middleware for Software Defined Vehicles
- Possible ways of consolidating vehicle safety critical and cloud connected applications
- Managing complexity and performance in a heterogeneous software architecture
- Outlook on central computer architectures and cloud native automotive development
Nikola Velinov, Senior Business Development Engineer, Green Hills Software LLC, Santa Barbara, CA, USA and Sreeja KS, Senior Architect, Transportation Business Unit, Co-author: Jyotsana Singh, both of Tata Elxsi Ltd., Trivandrum/Bangalore, India

Addressing the Challenge of Integrating Everything: Creating a Blueprint for Automotive Integrated Development
- Integrate standards, regulations, and different domains
- Holistic approach how to master complexity
- To manage work product and product maturity
- Challenges of integrating “everything”
Christian Hübscher, Principal Consultant and Ralf Geppert, Consultant, both of Kugler Maag Cie GmbH by UL Solutions, Kornwestheim

Distributed Development along the Automotive Supply Chain: 8 Insightful Recommendations for OEMs and Suppliers to Jointly Implement Cybersecurity
- Cybersecurity as a new quality dimension in distributed development in the automotive industry
- Success factors for cybersecurity on the side of the OEM and for Tier-N Suppliers
- Requirements for compliance with UN Regulation No 155 and application of ISO/SAE 21434
- Best practices and reliable tips for collaboration in cybersecurity challenges: Cybersecurity management/ Cybersecurity engineering
Manuel Sandler, Partner, Consulting, CYRES Consulting Services GmbH, Munich

Where is Everybody? Looking for Remote Attacks on Cars in the Wild
- Honeytrap application in the automotive domain
- Systems that an automotive honeypot should mimic
- Existing open-source tools that can be used to build an automotive honeypot
Niclas Hg, M. Sc., PhD Student, Corporate Research – Reliable Distributed Systems, Co-authors: Dr. Paul Duplys, Dr. Dominik Sisejkovic, all of Robert Bosch GmbH, Renningen/Ludwigsburg/Hildesheim

13:15 Lunch break, Exhibition and Start-up Area visit

Register at: www.eliv-congress.com

The Challenges to Move to Fail-Safe Operation in E/E Architecture
- Specific challenges regarding fault-tolerant power-net architectures in commercial vehicles
- Comparison with redundancies in already existing systems in commercial vehicles (in particular brake systems) and in aviation
- Concept of a fail tolerant, ASIL capable and modular power-net architecture for commercial vehicles
David Kiss, Product Owner, R&D, Knorr-Bremse SfN GmbH, Budapest, Hungary

Enabling a Software Platform for Faster-feature Deployment in Next-generation Commercial Vehicles
- How to migrate existing functions to HPC environments
- How to increase significant reuse of existing legacy software and systems
- How to create hybrid functions that include service and signal driven designs
- How to speed-up integration activities for such functions
Dr. Nico Hartmann, CTO, Qorix, Munich
Plenary Speeches and Award Ceremony – New York (Ground Floor)

Moderation: Dr. Rolf Zöller, Porsche AG und Porsche Digital, Weissach

14:30 Liquid AI – Closing the Gaps toward Autonomous Driving
- Hitting the supervised learning wall - today’s AD road-blockers
- Technology solutions for cost efficient AD
- Liquid AI: A technical deep dive
- Autobrains’ vision for a safe transition to AD

Igal Raichelgauz, B. Sc., Founder & CEO, Autobrains Technologies Ltd., Tel Aviv-Yafo, Israel

15:00 Semiconductors Are Driving Sensing and Thinking
- Impact semiconductor chips and software have had on our world
- Macrotrends driving these innovations
- Resulting discontinuities that must be overcome
- A new world where semiconductors drive sensing and thinking across many applications is within reach

Dr.-Ing. Yankin Tanurhan, Senior Vice President of Engineering, Solutions Group, Synopsys, Inc., Sunnyvale, CA, USA

15:30 Conclusion and Discussion
Management Summary of the Sessions: The most important take-aways presented by members of the Program Committee

16:00 Award Ceremony “Auto Electronic Excellence Award 2023” and best Start-up

16:15 End of the Congress
Power Electronics and Circuit Board Design for E-Mobility – The Latest Megatrends Without Ignoring the Enablers or the Classic Topics

In modern vehicles, power electronics are becoming increasingly important due to electro-mobility and the increasing number of electronically controlled functions. An important component of power electronics are printed circuit boards. Various electronic components are connected to each other on these, allowing them to communicate with each other. The demands on printed circuit boards are also increasing rapidly – higher currents and low volumes bring with them a conflict of objectives that developers must meet.

In this workshop you will first receive a practice-oriented overview of the energy storage devices, switching elements and basic circuits of the power electronics used in modern vehicles. These are presented using practical examples. Furthermore the challenges in the layout and design of printed circuit boards for automotive applications will be discussed. In addition to larger currents and the associated higher temperatures, e.g. an EMC-compliant design and thermal management must be taken into account. You will learn which materials and assemblies are suitable for use in electric vehicles. You will get an overview of the advantages and disadvantages of the various offers on the market and be able to take them into account when designing printed circuit boards.

Who is the target group of this workshop?
- Development Engineers
- Project managers
- Technical executives
in the vehicle and supplier industry and at development service providers in the E/E sector

Content of this workshop
- Energy storage, consumers, systems, the need for voltage transformation
- Basics HV and the voltage transformation
- Basic voltage transformation circuits
- Interference suppression, mains filter, XY-capacitors, mains filter structure
- Requirements for interference suppression capacitors (DIN EN)
- Components (power transistor, diodes, relays)
- Electronics design process of a circuit board and assembly
- Circuit board manufacturing
**List of Exhibitors (September 19, 2023)**

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<th>Company Name</th>
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<td>Emproof B.V.</td>
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<td>Apex.AI GmbH</td>
<td>ETAS GmbH</td>
<td>Lumotive, Inc.</td>
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<td>APL Automobil-Prüftechnik Landau GmbH</td>
<td>FERCHAU Automotive GmbH</td>
<td>Magna Steyr Fahrzeugtechnik GmbH &amp; Co. KG</td>
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<td>Argus Cyber Security Ltd.</td>
<td>FEV Europe GmbH</td>
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<td>ARM Limited</td>
<td>Fraunhofer Institute for Integrated Circuits IIS</td>
<td>MD Elektronik GmbH</td>
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<td>Aurora Labs</td>
<td>GIWI embedded systems GmbH &amp; Co. KG</td>
<td>MELECS EWS GmbH</td>
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<td>Green Hills Software GmbH</td>
<td>National Instruments Corporation</td>
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<td>Cadence Design Systems GmbH</td>
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**Start-up Area**

ELIV offers young companies the opportunity of presenting their latest developments and products in automotive electronics in the start-up area. Get the chance to meet the exclusive, international group of participants consisting of decision-makers and specialists from vehicle manufacturers, suppliers, and service providers as well as representatives from universities! In addition to a full-service package with a 4 sqm booth space in the start-up area, a presentation slot on the start-up stage is also included.

**Interested in taking part?**

To apply, request the registration documents for the Start-up Area. We are happy to provide assistance and further information:

Jasmin Habel  
Project Consultant  
Exhibition & Sponsorship  
Phone: +49 211 6214-213  
Email: jasmin.habel@vdi.de

You will find the program and more information on our start up area on:  

**See who is already participating in the start-up area:**


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We connect you – and your company  
Would you like to present your products and services to the industry’s key players?  
Participate in the event as an exhibitor or sponsor.

If you are interested, get in touch with:  
Martina Slominski  
Team Leader Exhibition & Sponsorship  
Phone: +49 211 6214-385  
E-Mail: slominski@vdi.de
Program Start-ups

Moderation: Meike Neitz

Wednesday, 18 October 2023

13:40 Making the future of Autonomous Mobility a reality with SingleChip LiDARs
Oli Ramoli, B. A., Scantinel

14:00 Spatial AI als Alternative zu LiDAR
Sven Fülscher, M. Sc., DeepSafety

14:20 Metamaterials Meet Mobility: Redefining Automotive Lidar
Dr. Sam Heidari, PhD, Lumotive

14:40 Precise Positioning, Mapping and Environment Detection with the Integrated Sensor Platform
Dr.-Ing. Patrick Henkel, ANavS Sensor Technologies GmbH

15:00 Super fast Vehicle Function Programming in Rust – from rapid prototyping to production with the same code
Dr.-Ing. Stefan Nürnberg, Elexir

15:20 GenAI-Based Business Process Automation
Dr.-Ing. Max von Groll, Ailantus GmbH

15:40 Revolutionising technical compliance: Unleashing the Power of Regulatory Data with an innovative Technical Compliance Software
Nico Wächterle, LL. M., Certivity

16:00 Driving Security: Leveraging Digital Twins for Firmware Emulation in Automotive Cyber Security
Dr.-Ing. Mario-Valentin Trompeter, CyberDanube

16:20 Automated Product Cybersecurity and Compliance
Jan C. Wendenburg, Onekey

16:40 Safeguarding Against Software-Induced Failures: Fault Injection Testing in Automotive Systems
Shaleen Sharma, MBA, S2 Technologies

17:00 Unlocking Efficiency and Precision: Leveraging Static Source Code Analysis in Automotive Software Development
Dr.-Inform. Michael Rückauer, Emmtrix

Thursday, 19 October 2023

11:00 Can we establish a highly efficient and highly scalable software platform for the Automotive industry
Dr.-Ing. Christian Renner, RealThingks

11:20 How to release software automatically in high-regulated industries like automotive, banking
Dr. Christoph Peters, grow platform GmbH

11:40 What annoys you every day with an electric car?
Armin Hager, Voitas

12:00 Solving the challenges with deploying DL on SoCs
Peter Kristiansen, M. Sc., Embedl

12:20 Safety Critical System (ADAS L2+) – Middleware running Trailer Hitch Assist feature
Sandeep Sharma, Jangoo

12:40 Matchmaking with ZIGY platform
Gyula Szathmary, MBA, ZIGY CONSULTING

13:00 Automotive Security: Protecting embedded software from malicious attacks and IP theft
Andreas Thull, M. Sc., Emproof

16:00 Best Start-up Award – Room: New York
Vote for the best start-up at ELIV!
“The Best Start-Up” award ceremony will take place at the end of the second congress day.
Brose is the fourth-largest family-owned automotive supplier. Every second new car worldwide is equipped with at least one Brose product. The company’s intelligent solutions for vehicle access and interiors provide greater comfort and flexibility. Innovative concepts for thermal management increase efficiency and contribute to environmental and climate protection. Brose’s systems understanding enables new functions in all kinds of vehicles – whether on four or two wheels. Including the joint venture Brose Sitech, the company employs 30,000 people at around 70 locations in 25 countries.

Contact: Brose Fahrzeugteile SE & Co. Kommanditgesellschaft
Christoph Maag, Vice President Electronics Brose Group
Berliner Ring 1 | 96052 Bamberg
Phone: +49 951 7474 4744 | Fax: +49 951 7474 1767
E-Mail: christoph.maag@brose.com
Web: www.brose.com

MathWorks is a leading provider of simulation and validation solutions worldwide for developing connected, autonomous, and electrically powered vehicles. Our range of end-to-end solutions is used particularly by automotive manufacturers and their suppliers to test the software and hardware components in their new vehicles, long before a new model is allowed on the road. Our portfolio ranges from end-to-end solutions for simulation and validation to engineering and consulting services as well as support.

Contact: MathWorks
Friedlandstr. 18 | 52064 Aachen
Phone: +49 241 4757-6700 | Email: contact@mathworks.de
Web: www.mathworks.de/automotive

Tata Technologies GmbH, a subsidiary of Tata Technologies, is strategically set up to help German OEMs and Tier 1s conceptualize, develop, and realize better products that are safer, cleaner, and improve the quality of life for all the stakeholders. It leverages our global diverse talent pool of 11,000+ innovators spread across 27+ countries, and global best practices to help our customers develop competitive products and win at the marketplace.

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Phone: +49 711 49039659
E-Mail: Rahul.prathap@tatatechnologies.com
Web: www.tatatechnologies.com
Members of the Program Committee

Kai-Uwe Balszuweit, Vice President Quality Management E/E Systems, BMW Group, Munich

Jan Becker, CEO, Apex.AI, Inc., Palo Alto, CA, USA

Dipl.-Ing. Harald Deiss, Vice President Electronic Systems, ZF Friedrichshafen AG, Auerbach

Dipl.-Inf. Elmar Frickenstein, Elstein Consulting & former BMW AG, Munich

Steffen Glemser, Senior Director Electronic Systems, ZF Friedrichshafen AG, Auerbach

Johann Langenwalter, Senior Vice President Autonomous Driving, Autobrain AI Technologies GmbH, Berlin

Ralf Lenninger, former Continental AG, Regensburg

Dipl.-Ing. Uwe Michael, mps, Rödermark

Dr. Burkhard Milke, Director GME Electrical Systems & Infotainment, Opel Automobile GmbH, Rüsselsheim

Dr.-Ing. Dieter Rödder, Senior Vice President Advance Engineering Systems 1 – Future Automotive Systems, Robert Bosch GmbH, Stuttgart

Maik Rohde, Head of IIL-System, Volkswagen AG, Wolfsburg

Dipl.-Ing. Martin Schleicher, Head of Software Strategy, Continental AG, Erlangen

Dipl.-Ing. Stefan Singer, Senior Director E/E Architecture Strategies, Renesas Electronics, Munich

Dr. Riclef Schmidt-Clausen, Senior Vice President Intelligent Cockpit & Body, CARIAD SE, Ingolstadt

Dr. Jutta Schneider, Director Vehicle Powernet and EE Hardware, Mercedes-Benz AG, Sindelfingen

Dipl.-Ing. Stefan Teuchert, President and CEO E/E Function Development, MAN Truck & Bus SE, Munich

Dr.-Ing. Michael Winkler, CEO, HELLA Fahrzeugkomponenten GmbH, Bremen

Joachim Ziethen, Member of the Executive Board BU Electronics – Product Center Body/Lighting Electronics, HELLA GmbH & Co. KGaA, Lippstadt

Dr. Rolf Zöller, Director Smart Connected Vehicle Porsche AG and Managing Director Porsche Digital, Weissach (Chair)

Scientific Support

The VDI Society Automotive and Traffic Systems Technologies (FVT) with its five Technical Divisions offers a home for engineers from a wide range of disciplines in the fields of “road”, “rail”, “air” and “water” transport. Through active interplay with the working groups of the VDI Regional Associations, the students and young engineers as well as the other VDI Technical Societies, the VDI FVT is networked nationally and internationally with other cooperation partners. The stated task of the VDI FVT is to strengthen the perception of the engineering profession and to establish the VDI as a technical-scientific opinion leader in professional circles, politics and society. The aim here is to promote the interaction of the various mobility areas and to provide technical impetus, as well as to develop perspectives for cross-sectional topics relating to “People and Mobility” and “Means of Transports and Infrastructure.

More information: www.vdi.de/fvt
General Information

**ELIV – Electronics in Vehicles**

Good Reasons to be part of this industry meeting:

- ✓ Technical content of high quality: more than 80 expert presentations with technical depth
- ✓ ELIV is the world’s largest Congress for Automotive Electronics, Software and Applications – be part of the community in Bonn!
- ✓ Reach out to long-known fellow experts, find new project partners and pave the way to establish new business ties
- ✓ Free entrance to the parallel running “E/E in Commercial Vehicles”
- ✓ Speakers corners – debate with the presenters personally
- ✓ Great trade exhibition with about 100 international exhibitors gives an overview of new products and solutions

Who you will meet:

Delegate groups: decision-makers, engineers, technicians, developers etc. from the field of industry (OEM, Tier 1+2), economy, research & development

- 24% Car Manufacturers
- 28% Tier 1 / Tier 2 – Automotive suppliers
- 17% Software Providers
- 7% Hardware Providers
- 6% Electronics
- 10% Mobile Communications
- 8% Cities, Fleet, Infrastructur

Register at: www.eliv-congress.com
Free entrance to the parallel running "E/E in Commercial Vehicles" speakers corners – debate with the presenters personally

Great trade exhibition with about 100 international exhibitors gives an overview of new products and solutions
**ELIV – Electronics in Vehicles**

The ELIV (Electronics in Vehicles) congress is an exceptional event that brings together top industry professionals and experts in the field of automotive electronics. It offers a unique combination of strategic keynote presentations and an unparalleled technical program, making it a perfect platform for both technical executives seeking insights into industry trends and engineers involved in research and development looking to acquire the latest technical know-how.

**Participation Fee**

<table>
<thead>
<tr>
<th>ELIV 2013</th>
<th>Workshop „Power Electronics and Circuit Board Design for E-Mobility“</th>
<th>Congress + Workshop</th>
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<tbody>
<tr>
<td><strong>October 18-19, 2023</strong>&lt;br&gt; Bonn (01TA101023)</td>
<td><strong>October 20, 2023</strong>&lt;br&gt; Bonn (01ST158023)</td>
<td><strong>October 18-20, 2023</strong>&lt;br&gt; Bonn (01TA101023 + 01ST158023)</td>
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<tr>
<td>EUR 1,890.00 plus VAT</td>
<td>EUR 990.00 plus VAT</td>
<td>EUR 2,730.00 plus VAT</td>
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The following services are included:

- Access to Keynotes and Sessions of the ELIV and parallel Conference E/E Commercial Vehicles
- Digital event documentation
- Event-App Access
- Beverages during breaks
- Lunch on both Congress Days
- Night of Electronics on the MS RheinEnergie
- Visit of the exhibition, Start-up Area and special Start-up Program

**Venue**

World Conference Center Bonn
Platz der Vereinten Nationen 2
53113 Bonn
Germany

**Accommodation**

A limited number of rooms have been reserved for congress participants. Please visit www.eliv-congress.com for further information. More Hotels close to the congress venue may be found via our HRS service www.vdi-wissensforum.de/hrs.

Any more questions? Contact us!
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