Foreword AmE 2021 – Automotive meets Electronics

Heading for new Shores in the World of Automotive and Electronics

In the same way as time will be subject to permanent changes, the focus of the AmE Conference is going to change. More than ten years ago, when the AmE Conference was launched, automotive electronics was characterized by a continuously growing network of many dedicated ECUs.

Mobility becomes a Service

Looking at today's technology and changing requirements, particularly in communication, we see that mobility turns out to become a service rather than a means of transport. Intermodal travelling is in the transition from vision to reality, and car sharing is no longer the dream of lunatics – it has rather become a viable option for many people, especially in combination with electric vehicles.

Changes bring furter Changes ...

These changes imply changes in automotive technology and development methodologies. The architecture is in transition from a heterogenous network of ECUs towards a centralized system with high computational power. These new systems are built with new technologies and require new development and simulation tools for handling the complexity. The current software development will continue regarding many safety relevant domains, but new approaches such as Artificial Intelligence/Machine Learning will enter the stage due to the necessity to handle the huge amounts of data, generated by sensors and the link to the backbone servers providing additional information.

AmE addresses industry as well as academia to improve the communication between the two mentioned worlds, triggering new ideas. AmE is also an excellent platform for presenting research work and getting immediate feedback from application engineering. This interaction is one of the main strengths of the AmE and the biggest reward for all participants.

Dr.-Ing. Michael Wahl Universität Siegen Chairman