Model-based Development in the Upcoming Automotive Embedded Software Architecture of AUTOSAR

Bruce Emaus, President of Vector CANtech and Chair of SAE Embedded Software Standards
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Abstract:
As automotive product architectures continue to migrate toward higher levels of distributed-ness with increasing system and software complexity, the use of model-driven automotive embedded software development is rapidly changing as the industry pushes forward with a new automotive software architecture called AUTOSAR. This presentation discusses both the essential business case for AUTOSAR and the design challenges of model-based software development in the automotive distributed embedded system domain.

Bio:
Bruce Emaus is the President of Vector CANtech, a company that specializes in development tools and embedded software components for automotive distributed applications. Mr. Emaus is also the chairman of the SAE Embedded Software Standards Committee and co-chair of the SAE Distributed Embedded Systems Engineering Task Force.

With over 30 years of product development experience covering embedded software, electronics hardware, systems and information engineering, he is a leading expert in the area of distributed embedded systems and small area network protocols.

As a 1971 graduate of the University of Michigan, Bruce's accomplishments include the development of Ford's first trip computer (Tripminder), Ford's first internally-created integrated circuit (Angular Spark Control), the creation of Ford's first peer-to-peer UART-based protocol (ACP), and the development of an early distributed electronic music system architecture before the advent of MIDI.