



## KEYNOTE SPEAKER

**Dr. Stefan Kimmerle**, Director Engineering, Bosch Sensortec GmbH (Germany)

### *Use-Cases and challenges of MEMS in consumer electronics*

#### **Abstract**

The MEMS market and especially its non-automotive area has grown for many years and continues to grow significantly in the future. Bosch Sensortec delivers billions of MEMS into smartphones, wearables, hearables, gaming, IoT, industrial, robotics, ... now since 2005. This keynote addresses the use-cases and challenges in consumer electronics due to increasing requirements with respect to functionality, smartness, size, integration of hardware and software, performance parameters like accuracy or noise, robustness and power-consumption. Also the importance of domain knowledge and AI-based methods and/or embedded AI on the MEMS sensor itself will be discussed.

#### **Biography**

Stefan Kimmerle is Director Engineering at Bosch Sensortec. He is responsible for research and development of sensors based on microelectromechanical systems (MEMS) for consumer electronics and related industries. Stefan studied physics in Stuttgart, Tübingen and San Diego and graduated with a diploma degree in 2001. He continued his studies in physical based modelling and simulations at University Tübingen and INRIA Grenoble and graduated with a Dr. rer.-nat. degree in computer science in 2005. During his career, he held various positions in the field of MEMS, semiconductors, customer application and sensor research and development in the Bosch Group, such as Project and Team Manager Application Automotive Pressure Sensors, Accelerometer and IMUs (Inertial Measurement Units), Section Manager Consumer Pressure and Environmental Sensors as well as Director Sensor Predevelopment and Development Consumer Sensor Products.

