

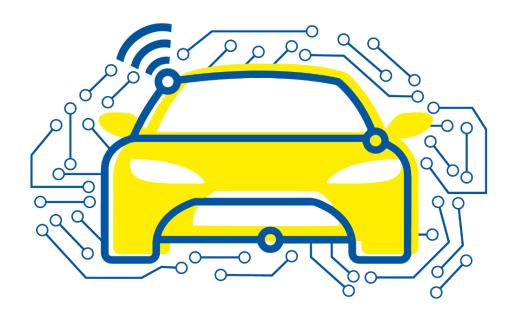
## **Automated and Connected Driving Challenges**

Section 1 – Introduction & Tools

Robot Operating System
Tasks

Bastian Lampe

Institute for Automotive Engineering





# **Robot Operating System – Introduction**

### **ROS Tasks**



#### Introduction – Tools – Setup Coding Environment

- clone ACDC Repository
- install Docker
- pull docker image
- start container

#### Practical ROS tasks

ROS Foundations: Master, Nodes, Parameters,

Messages, Topics, Services,

Launch

ROS GUI Tools:
RQT, RVIZ

ROS Coding: C++ Nodes

ROS Bag: Record, Info, Play, GUI

ROS Application: Vehicle Controller

ROS2: Introduction and ROS Bridge



Video: ika