

SIGNAL PROCESSING

ACOUSTIC FEATURE EXTRACTION



Moving functions into the vehicle for greater efficiency and improved computational performance through edge computing in acoustic analysis of vehicle characteristics.



Challenge

- Road condition effects a car's handling
- Tire condition info increases driving experience
- Detecting component defects enables predictive maintenance



Solution

- Using acoustic data to add values to chassis' functionalities
- Estimate tire and road conditions using machine learning algorithms
- Meaningful acoustic features allows implementation on ECU



Added Value

- Development of machine learning algorithms
- Evaluation of different acoustic features
- Design & Implementation of SW-toolchain to structure and process large sets of data as well as different data sources
- Fast development cycles

