

## Student Thesis



Bachelor / Master thesis

# Development of an Acoustic Sensor System to detect Noise Emissions

## Topic and Goal of the Thesis

Road traffic noise affects human health and is particularly critical in populous cities. In order to reduce immense noise emissions, primarily noise-intensive vehicles have to be identified by recording and analyzing the acoustic vehicle characteristics. Therefore, this thesis aims to develop a new sensor system for recording noise emissions. An important part of this thesis is to implement the software structure of the acoustic data logger.

## Working Points

- Literature research on data logging based on acoustic sensor technology
- Development of a concept for recording and storing acoustic data
- Application and evaluation of the developed concept

## Requirements

- Very good knowledge of German and/or English
- Reliability, commitment and independent working attitude
- Programming knowledge in Python advantageous

## Department

Vehicle Dynamics & Acoustics

## Contact



Carina Diemel

☎ +49 241 80 23892

✉ carina.diemel@ika.rwth-aachen.de

## Language

German or English

## Entry Date

Earliest possible date

## Prior knowledge

Automotive Engineering, Programming knowledge (advantageous)