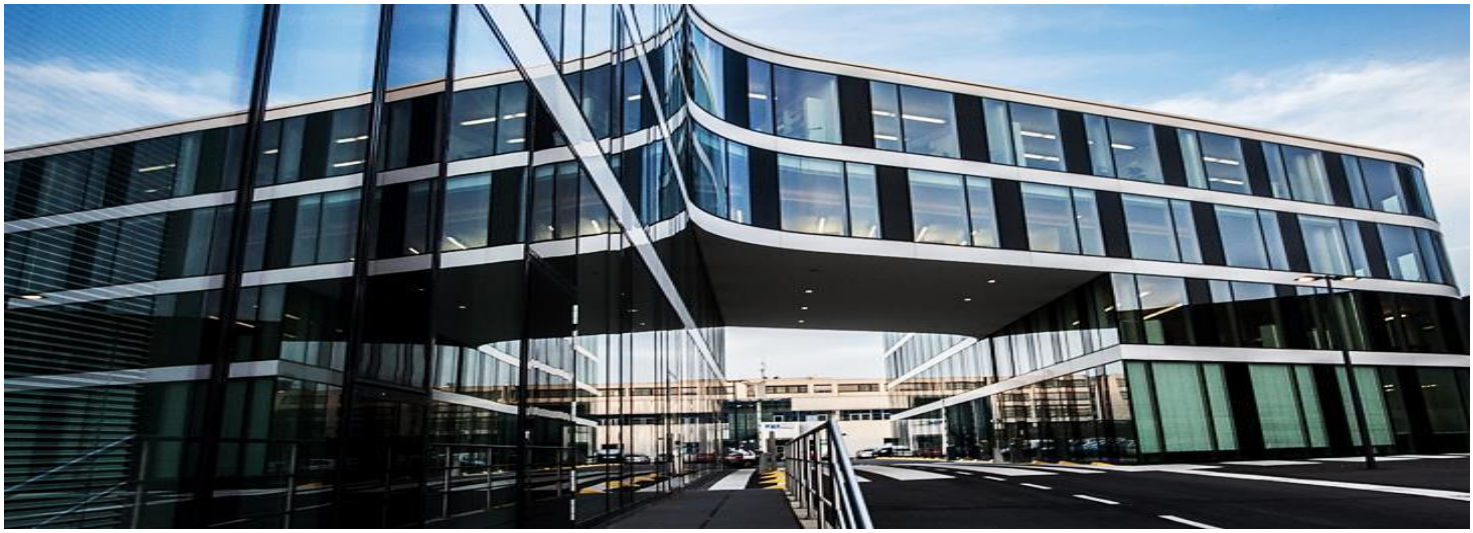

Teaching and Research Area Mechatronics in Mobile Propulsion | RWTH AACHEN UNIVERSITY

We are the Teaching and Research Area Mechatronics in Mobile Propulsion (MMP). Our heart beats for the technology of tomorrow's mobility. Around the interdisciplinary topics of mechanics, electrical engineering and information technology, we research sustainable and demand-oriented drive and vehicle concepts. We bring the future into drives!

You want to know more about us? Then you will find more information under the following links:

- Who we are
- What drives us
- What we research
- Where we are involved
- How we bring research into teaching

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A Novel Framework for Drivable Area Classification with Enhanced Environmental Sensing in Critical Driving Scenarios.

More and more driver assistance functions are now being applied to series-produced automobiles. Trajectory planning, especially the recognition of driving environments and the classification of drivable areas, plays an important role in the intelligent driving. Current research concentrates only on the road, however, in some extreme driving scenarios, the environment including both sides of the road is crucial for trajectory planning.

Your tasks:

- Literature research on traffic environment recognition and classification methods.
- Development of a framework for integrating the environment information and classifying drivable areas based on camera and map information
- Validation of the developed framework.

Your experience in one of the following areas:

- Knowledge in image recognition or optimization method or ML
- Knowledge in Python or C or MATLAB

Would you like to know more?

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