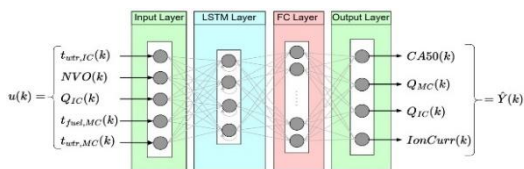


We are the Teaching and Research Area Mechatronics in Mobile Propulsion (MMP). Our heart beats for the technology of tomorrow's mobility. Around the interdisciplinary topics of mechanics, electrical engineering and information technology, we research sustainable and demand-oriented drive and vehicle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



## Bachelor Thesis / Master Thesis

### Start: from now

- ☒ Faculty 1 - Mathematics, Computer Science and Natural Sciences
- ☒ Faculty 4 - Mechanical Engineering
- ☒ Faculty 6 - Electrical Engineering and Information Technology

### Automated Machine Learning for Control Oriented Model Identification

Machine learning (ML) approaches have been successfully used for chaotic systems, which often pose challenges for control and modeling. Data pre- and postprocessing as well as training hyperparameter identification are iterative and time-consuming processes, where Automated ML (AutoML) is a great opportunity for acceleration and simplification.

#### Your tasks:

- Development of an AutoML algorithm for ML based model identification
- Literature research of the above-mentioned topics

#### Your competences:

- Knowledge in Python and/or MATLAB
- Knowledge in Machine Learning is beneficial.

#### Your benefits:

- Experience with cutting edge open source ML tools and RWTH High Performance Computing Cluster
- International, interdisciplinary research project with the University of Alberta (Edmonton, Canada)
- Potential publication opportunities

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Would you like to know more?

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