



Bachelor Thesis

Class exercises / Writing / *Teleworking due to Corona outbreak*

Development and didactic improvement of the 'Cognitive technical systems' lecture material

Keywords: Cognitive science, German-English, Human-Machine systems, Writing

Conditions:

Duration: 3-4 Months
Requirements: Background in relevant subjects,
Good writing and German-English translation skills
Language: English
Target groups: Bachelor students (Maschinenbau, ISE)

Content:

Cognitive technical systems encompass machines that can autonomously perceive their environment and act accordingly. It includes fields such as artificial intelligence, knowledge based systems, robotics, mechatronics, machine learning, computer vision, natural language processing, and simulation.

Lecture material for cognitive technical systems require periodic updates.

In this thesis, the student will be required to understand the lecture material for cognitive technical systems, translate and document new exercises.

The steps related to this work are summarized as follows:

- Understand, translate, and update material (in accordance with Prof. Söffker)
- Partly integrate the new didactic concept (from functional safety lecture) into the material
- Develop concept for didactic integration of exercise material
- Complete documentation, final presentation and thesis submission.



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