

Bachelor / Master Thesis

Aushang ab:
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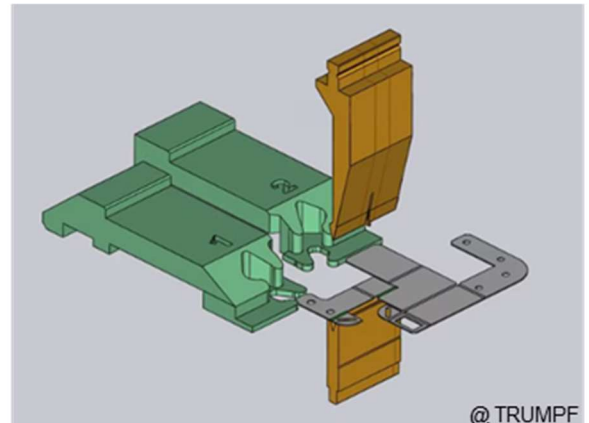
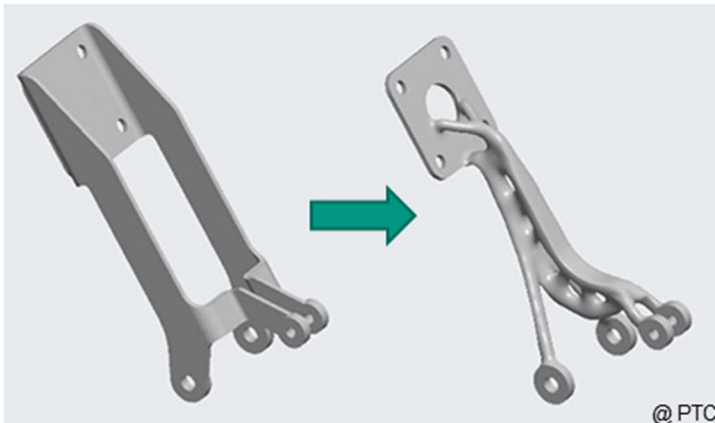
Status: open
Research group: Design Methods

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AI in engineering design - evaluation and optimization of AI-supported tools

Artificial intelligence (AI) has become increasingly important in recent years and its use extends across various industries. While AI models such as ChatGPT are leading the way in the field of language processing, AI is also increasingly being used in mechanical engineering. In the design phase, AI-supported technologies are used for the automated generation of CAD designs and production data, cost calculation and CO2 calculation, among other things. These tools promise to increase efficiency and simplify complex calculations and decisions.



Objective:

This thesis aims to evaluate current AI-supported technologies in design and to analyze their effectiveness in practice. It will also examine which measures can contribute to improving these technologies and how designers can be better supported in using these tools.

Tasks:

- Analysis of the current state of AI applications in construction
- Evaluation of the performance of existing AI-supported tools through a design study
- Identification of potential improvements in the use of tools
- Analysis of the requirements and needs of designers when using AI-supported tools

Profile:

- Independent and structured way of working
- Analytical skills and interest in optimizing technical processes
- Interest in the areas of artificial intelligence and CAD software