

Bachelorthesis

CAD-Benchmark

Research, comparison and evaluation of commercial and non-commercial CAD tools

The Institute

At the Institute for Digital Engineering and Production, innovative research and development projects play a central role. Our institute focuses on advancing digital transformation across various industries. We develop modern digital as well as real-world solutions that optimize the use of information and communication technologies in production and engineering. Within IDEeP, we are organized into five interdisciplinary specialist groups that cover all areas of the modern product lifecycle.

Motivation & Subject

CAD tools play a central role in digital production and are indispensable for the efficient development and design of products. They enable the planning, simulation, and optimization of complex constructions, leading to higher product quality and shorter development times. Today, almost exclusively commercial CAD systems are used in industry. In addition, various non-commercial or open-source tools are available, which have made enormous strides in functionality and user-friendliness in recent years. Can such systems represent a serious alternative to well-known CAD systems?

Your profile

- Engineering students or related disciplines
- Initial experience in the use of CAD tools
- Good written and spoken German and English skills
- High level of commitment and independence, as well as the ability to work in a structured manner

Workpackages

- Orientation & research
- Definition and development of exemplary cases
- Processing, assessment and evaluation of the exemplary test cases
- Comparison of results, workflows and usability
- Documentation & Evaluation

Are you interested?

Are you proactive, independent and motivated? Do you have a solid knowledge of the fundamentals of engineering, an affinity for the above-mentioned specialist areas and previous knowledge of design tools such as CAD tools? Then apply at any time with a cover letter, your CV, references, a current transcript of records and other relevant certificates to...

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