Graz University of Technology

Institute of Automotive Engineering

Master Thesis

Development of automated design methods for the creation of joining technology in CAD

Computer-aided design has established itself as a central discipline in automotive development processes. In addition to the geometry-oriented development of components and modules, CAD is used to determine structural, functional and production-influenced product properties. Furthermore, the CAD model provides joining technology data for simulation and production processes as well as other processes in vehicle development. The aim of this master thesis is the development and implementation of a knowledge-based tool that enables the automatic creation of joining technology in CAD environments.

Scope of work:

- Abstraction of selected issues and development of solution approaches to support styling and design processes
- Implementation of solution approaches in knowledge-based tools / applications in CAD systems (especially CATIA)
- Implementation of the tool in the system environment of the industry partner
- Documentation and presentation of the work

Requirements:

- Knowledge & experience with CATIA or other CAD systems
- Knowledge in object-oriented programming (Visual Studio, C#, VB.NET)
- Fundamentals of automotive engineering (body design)

Duration: 6 month
Start: As from now
Workplace: Institute of Automotive Engineering / Magna Steyr Fahrzeugtechnik Graz

An expense allowance is offered for the Master's thesis.

http://ftg.tugraz.at

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05.05.2020