

Master Thesis



Image source: [Autodesk](https://www.autodesk.com)

Analysis and Feasibility Study for the Utilization of AI-Methods in the Field of Automotive Product Development

AI systems offer great potential for solving complex problems in a wide range of technical areas. Currently, this technology is mainly used, for example, in software development, object recognition or comprehensive optimization tasks. Due to rapidly advancing technology and continuously growing computational power, the topic of Artificial Intelligence (AI) is becoming more and more relevant in the automotive sector. Especially in the virtual product development, where domain-specific computer-aided methods have been used so far, the demand for AI-supported systems is growing. The aim of this master thesis is to develop different methods as well as associated feasibility studies for the utilization of AI to optimize different activities in the product development process.

Scope of work:

- Market research to provide transparency over existing technologies in the sector
- Definition of innovation potentials
- Development of different methods as well as associated feasibility studies to assist the virtual product development process by AI technologies
- Documentation and presentation of the work

Requirements:

- Great interest in future-oriented technologies including AI
- Fundamentals of automotive engineering (virtual product development)
- Advantageous: Basic knowledge about the topic of AI

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.

Contact:	Research Group of Virtual Product Development Dipl.-Ing. Dr. Alexander Kreis, alexander.kreis@tugraz.at , +43 664 88878948
-----------------	--