OTTO VON GUERICKE
UNIVERSITÄT
MAGDEBURG

**CHAIR OF
ELECTROMAGNETIC
COMPATIBILITY**

Solving engineering problems with large language models such as ChatGPT

Background and problem: Large language models and generative pre-trained transformers such as ChatGPT have enjoyed great popularity since the end of 2022. Although these are primarily language models and not knowledge models or logic models, attempts are often made to use them to solve mathematical, scientific or engineering-related questions or problems. The challenge here is the mathematical weakness of the models and the tendency to hallucinat i.e. to produce texts that sound good and look correct but are nevertheless incorrect in terms of content.

The aim of this project is to use ChatGPT to solve (exam) problems in engineering subjects, to mark correct and incorrect solution steps, to correct and improve the solution, to present the correct solution in a technically correct way and to discuss alternative solutions. In doing so, it is necessary to use expert knowledge within the domain of the problem and to use "high" levels of competence of the Bloom's taxonomy, e.g. analyze, evaluate, assess and create.

Task: The main objective of this work is a structured analysis. .

Supervisor: › Dr.-Ing. Mathias Magdowski (https://w5rs.ovgu.de/)

Nächste Meldung ▶