Chair for Computation in Engineering
Chair of Computational Modeling and Simulation

Software Lab:

Modeling: ★★☆☆☆
Mathematics: ★★★☆☆
Programming: ★★★★★

Transforming Building Information Modeling based product models to STEP-Format

Setting

Simulation tools such as CADFEM ANSYS do not support Building Information Modeling based product models. Instead, they often support the STEP-Data format. The goal of this project is to implement a BIM to STEP-Converter to enable simulation tools to handle also BIM data.

As an example it should be tried to import BIM Data to ANSYS. ANSYS Simulation nowadays is based on CityGML Models. To enhance simulation in terms of Building Information Modeling, the integration of IFC is necessary.

Task

Create an application that

- Enables IFC import
- Allows definition of an simulation setup directly in the application
- Exports an simulation file for further use in ANSYS
- Enables post visualization of the results.

Supervisors

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