Chair of Computational Modeling and Simulation Prof. Dr.-Ing. André Borrmann

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

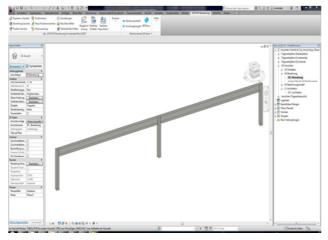
Software Lab:

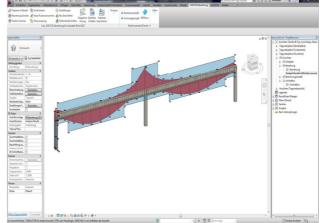
Automatic generation of 3D reinforcement

Setting

Nowadays, the term "Building Information Modeling (BIM)" is often used synonymously with 3D modeling. However, besides modeling, BIM means to use the model for further calculations. Downstream applications can reuse the data stored in the BIM model.

However, while there are a large number of downstream applications that use the data stored in the building models, the reuse of the calculated data in the original model (upstream approach) is not supported. The task in this SoftwareLab is to develop a Plug-In for Autodesk Revit, which assists designers with reinforcement planning through results from the calculations in the FEM software SOFiSTiK. This softwarelab will be conducted in close collaboration with SOFiSTiK developers.





Task

The Software Lab will include the following tasks:

- Develop an plug-in for Autodesk Revit
- Create 3D reinforcement automatically
- Information from structural calculations has to be used

Supervisors

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Cooperation Partner:

