



Tagungsband CG-DAY : Fünfter Computer Grafiktag in Kassel Oktober 2013

By Dieter Wloka

Shaker Verlag Dez 2013, 2013. Taschenbuch. Condition: Neu. Neuware - This thesis presents an approach for analyzing construction operations with micro tunnel boring machines (MTBM) utilizing process simulation. The goal is to develop an appropriate and adaptable simulation module for microtunnelling construction operations. It helps to analyze the processes and to identify the factors, which influence the operation productivity of the construction process essentially. In addition, the influence of different soil conditions and of disturbances on the productivity of microtunnelling operations have to be determined. In view of these objectives, a System Modeling Language (SysML) model describing the microtunnelling process is developed in the first step. The simulation model consists of three types of diagram: block definition diagram (bdd), state machine diagram (stm) and sequence diagram (sd), which are supported in the SysML. The simulation model is used to analyze and understand the entire process involved in microtunnelling construction and identify the model variables for which information needs to be collected. Subsequently, the simulation software AnyLogic is applied to create the MiSAS (Microtunnelling: Statistics, Analysis and Simulation) simulation module based on the SysML formalization. The implementation of the proposed methodologies, utilizes discrete event simulation (DES) and system dynamic (SD) modelling....



Reviews

Extensive information for book fans. It is writter in basic words and never hard to understand. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Otis Wisoky

This publication is great. It is full of wisdom and knowledge You will not really feel monotony at at any time of the time (that's what catalogs are for relating to when you ask me).

-- Dr. Everett Dicki DDS