



## **Informatik-Kolloquium**

Montag, den 04.05.2020, 17:00 Uhr,  
Videokonferenz

Forschungsprojekt:

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### **An Abstract Representation of Conflict Scenarios in a Shared Space Simulation Model**

Shared space, a growing substitute to conventional traffic design, promotes cooperation among heterogenous road users and optimal road usage by removing explicit traffic divisions and regulations. Nevertheless, realistic simulation models are essential to address doubts regarding its safety and efficiency. Though there are growing research simulating shared spaces, barely any of them focus on safety-related analysis. To this end, this work presents and evaluates a key part of safety-related simulation and analysis through a model of conflicts sustained during shared space simulations. This model can additionally be utilized by algorithms to both detect and categorize conflicts and to avoid collisions during simulation, furthermore for post-simulation analysis. A conceptual model based on property graphs and a graph database based proposed implementation is presented here. We justify our model through simulation analysis. Results advocate that more realistic simulation models of shared spaces and accurate safety-related information through further result analysis can be achieved with the help of this conflict model.