



Informatik-Kolloquium

Freitag, den 15.11.2019, 11:00 Uhr,
VK-Raum 107, Institut für Informatik (D3),
Julius-Albert-Str. 4

Forschungsprojekt:

Abstraction of road networks for vehicle platooning: Methods and Analysis

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Scrutiny of road networks is extensively used in the modeling of algorithms, planning, and application of transportation systems. A Road Network contains detailed geographic information from pedestrian lanes to railways tracks and rivers. Working with road networks is always complicated due to its high computational complexity by processing millions of nodes and edges. To reduce the complexity of algorithms and applications because of large and complex data set, the road network needs to be reduced or filtered depending upon the problem and importance of the required information from the original road network.

However, a subjective selection of the road network may result in an irregular road network with broken links among nodes. The aim of this research project is to transform the road network into an efficient data structure and to propose novel methods of network abstraction in order to achieve a computationally competent road network for the vehicle platooning problem.