



Informatik-Kolloquium

Forschungsprojekt

von Abdul Hakmeh, B.Sc.

Donnerstag, den 23.09.2021, 16:00 Uhr,

BigBlueButton <https://webconf.tu-clausthal.de/b/sve-42t-tcr>

“A simulated annealing-based approach for fuel-efficient vehicle platooning”

Platooning of vehicles is a novel approach to reduce fuel consumption in long-distance transportation services by establishing a string of vehicles driving on the road close behind each other to reduce the aerodynamic drag. The motivation relies on the fact that the fuel costs are held accountable for the third of the total operational costs of those services, besides being the Heavy-duty vehicles one of the carbon emissions sources. In this study, we examine the important but complex problem of assigning optimal routes to a set of vehicles, where many platooning potentials can be offered. We use the Simulated Annealing metaheuristic approach to solve the centralized routing problem with realistic assumptions on a real-world map.

Betreuer der Arbeit: Prof. Dr. Sven Hartmann und apl.Prof. Dr. Umut Durak