

HiWi Job:

Extention of Vehicles in Network Simulation (Veins) framework



With the development of technology, the awareness area of automatic vehicles has increased in size. Better sensors mean also a wider sensing range of vehicles and also higher comfort and safety for the drivers. Another way to further increase the awareness radius is by using vehicular communication. When vehicles send messages with their current status, these can propagate for hundreds of meters and other traffic participants receiving these messages can get the status of the sender.

Another way to increase awareness is by sending sensor data, such as, position and speed of other traffic participants nearby. By broadcasting this data, vehicles can make other communicating vehicles aware of unequipped vehicles which are outside of their field of view.

As part of this work the student should be able to extend the sensor model of the vehicles and run experiments with it.

Tasks:

- Implement the sensor model in the simulation environment
- Test the newly implement model
- Analyse the impact the new model has on the environment perception

Requirements:

- Knowledge in the field of communication networks (Mobilkommunikation)
- Good programming skills
- High motivation

If you are interested please contact:

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