



Traffic Routing for Autonomous Vehicles

Traffic systems, like for cars, ships and trains, are governed by many rules which provide safety and continuity of the traffic. Often, these rules are overly restrictive and lead to suboptimal efficiency. For instance traffic lights have guard periods with no traffic allowed and often reserve time for traffic in directions where there is no traffic.



At our group, we developed a novel routing algorithm which schedules vehicles more efficiently. Using this method, the vehicles move seemingly chaotic, but we can guarantee that neither deadlocks nor starvation occur.

The goal of this thesis is to further improve the efficiency of the existing simulation, extend the method with your own ideas, and finally compare the system to real-world traffic management, such as for the Swiss railway network.

Requirements: Creativity and programming skills are advantageous. The student(s) should be able to work independently on this topic!

Interested? Please contact us for more details!

Contact

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