Vehicle Trajectory Prediction based on Maneuver Recognition

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• Compute **safe** and **comfortable** trajectory for self driven vehicles.

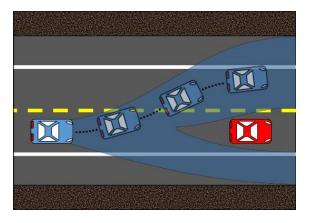


Figure: Possible trajectories for host vehicle¹

 $^{^{1}{\}tt http://controlfreaks.mne.psu.edu/Research_IntelligentSystems.html}$

Safety: Compute the occupancy prediction of other vehicles.

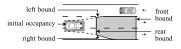


Figure: Occupancy prediction²

Comfort: Predict other vehicle most probable trajectory.

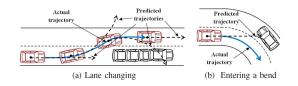


Figure: Possible vehicle trajectories³

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²Online Verification of Automated Road Vehicles Using Reachability Analysis, M. Althoff et al., 2014

Vehicle Trajectory Prediction based on Motion Model and Maneuver Recognition, A. Houenou et al., 2013

Interested? Contact me!

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Thank you!