

When and How to perform a Lane Change?

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- Ultimate goal: Compute **safe** and **comfortable** trajectories for autonomous vehicles.

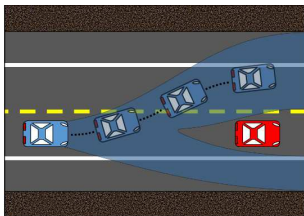


Figure: Possible trajectories for host vehicle¹

- Decide if either a lane change maneuver, or staying in the current lane is desirable,
- Select an appropriate inter-vehicle gap and time instant to initiate the maneuver,
- Generate control inputs to execute the selected maneuver.

¹http://controlfreaks.mne.psu.edu/Research_IntelligentSystems.html

Your task: Literature review

- Find different approaches from reference papers,
- Assess strengths and weaknesses for selected approaches,
- Identify potential gaps/issues in the selected approaches.

Interested? Contact me!

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Thank you!