

Automated Scenario Generation for Testing of AVs

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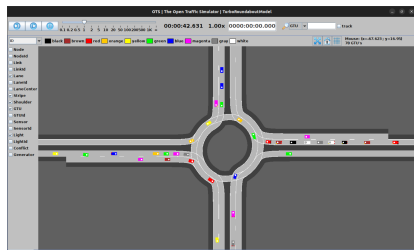
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Automated Scenario Generation

Motivation

- Verification of AVs creates need for high number of relevant traffic scenarios.
- Traffic simulation possible with microscopic traffic simulators such as SUMO or OTS.



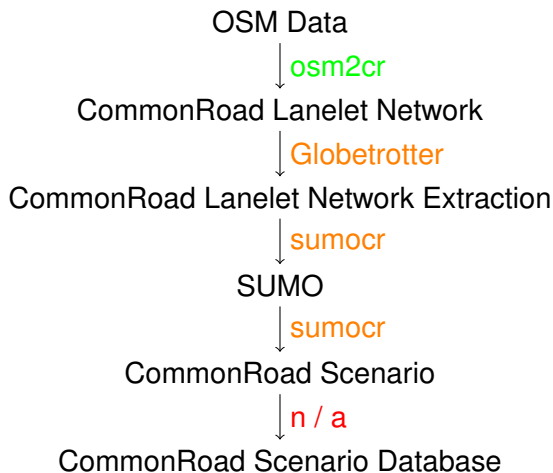
Open Traffic Sim: Realistic traffic simulation in a roundabout.

Goal

Set up scenario generation pipeline including

- different types of scenarios (interactive / non-interactive), on
- automatically chosen road networks (wide variety), with
- automatic labelling and selection of scenarios.

Scenario Generation Pipeline



Your tasks

- Develop more detailed pipeline structure (→ define modules, interfaces, and functionalities).
- Define and implement meta package, which controls the scenario generation process.
- Familiarize with existing code. Refactor to match defined module structure and interfaces. Implement missing functionalities.

Benefits

- Learnings: Software development, traffic simulation.
- Results will be used in an EU project.

Interested? Please contact me!

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