Coupling of CommonRoad Framework with the Open Traffic Simulator

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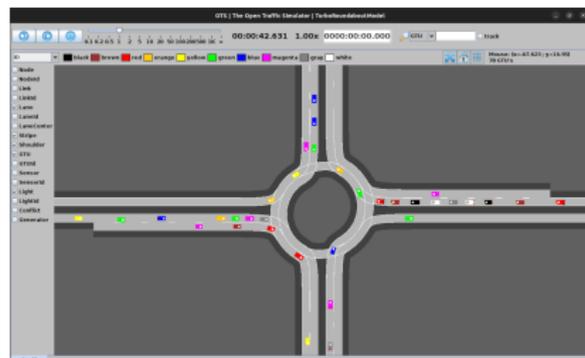
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CommonRoad – Open Traffic Sim – Integration

Background

- CommonRoad: Benchmark framework for motion planning algorithms
- Need to automatically generate traffic scenarios
- Open Traffic Sim: Precise human behavior modelling

Open Traffic Sim: Realistic traffic simulation in a roundabout.

Goal

Integrate Open Traffic Sim into the CommonRoad framework.

Your tasks

- Implement interface between CommonRoad (Python) and Open Traffic Sim (Java)
  - Calling Java package from Python
  - Conversion between different road network representations
  - Abstraction of traffic demand matrices from recorded datasets
  - Set up CI pipeline
  - ...

Benefits

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

Interested? Please contact me!

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