

Software Lab:

Automated Driving Systems - Co-Simulating Carla with Simulink®

Setting

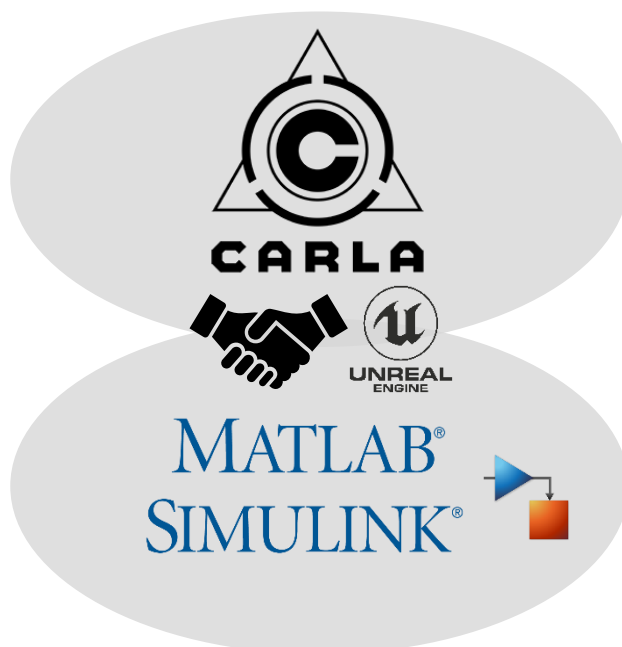
Carla is an open-source automated driving stack with grown popularity among users. The project is about demonstrating interconnectivity between MATLAB®, Simulink® and their toolboxes with a state-of-the-art open source automated driving environment.

Your Goal

Key objective of this project is to connect Carla to MATLAB® and Simulink® through Vehicle Dynamics Blockset™ and its Unreal Engine 4 integration for co-simulation. Additionally, an automated-driving co-simulation example needs to be developed and showcased.

Task

- Research on tools and co-simulation interface
- Development of a proof concept software-demo based on a self-chosen, urban automated driving scenario.
- Documentation of advantages and limitations of involved tools.
- Publish findings on MATLAB Central FileExchange.



Supervisors

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References

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