3D-CoAutoSim
3D Simulator for Cooperative ADAS and Automated Vehicles

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3D-CoAutoSim

unity

ROS
3D-CoAutoSim

- Environments
  - FHTW Environment
  - Race City Environment
  - SUMO OSM Neubaugurtel Environment
  - SUMO OSM Technikum Environment

- Scenarios
  - Validation Scenario
  - Technikum Wien Scenario

- Features
  - Automated Driving
  - Traffic sign detection
  - Traffic light assistance
  - Tailgate (Keep-Distance)

- Outputs
  - Vehicle Velocity [m/s]
  - Vehicle Steering Angle [deg]
  - Vehicle Throttle Pedal [0-1]
  - Vehicle Brake Pedal [0-1]

- Devices
  - CAN Bus
  - GPS
  - Lidar
  - Monocular
Driving Platform

❖ Pedals
❖ Gears shifter
❖ Steering wheel
❖ Car play seat
❖ Overhead HD beamer
❖ 5.1 surround sound system
3D-CoAutoSim
OSM & SUMO
Publication


❖ To be presented during IEEE ITSC’2018 in Maui, Hawaii during Nov. 4-7, 2018
Thanks!

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GitHub Link