

Domain: **Transportation**

Topic: Autonomous Vehicles

<u>Status</u>

We are testing self-driving cars in a virtual environment.

So, we chose a simulator named 'Carla'.

CARLA (Car Learning to Act) is an open-source simulator designed for autonomous driving research and development. It provides a realistic and flexible environment for testing and training autonomous driving algorithms and systems.

The CARLA simulator consists of a scalable client-server architecture.

We use Carla in Windows Operating system instead Linux, so might expect some problems

Setting up the software is completed

And some basic testing was successfully done.

We just try some project parts like

- 1. Connect client to Carla local server
- 2. Getting objects form server to client file (jupyter notebook)
- 3. Generate some random vehicles for the city (testing purpose)
- 4. And giving the ability of autopilot to the vehicles
- 5. And some other testing

We just provide some screenshots of the work,



