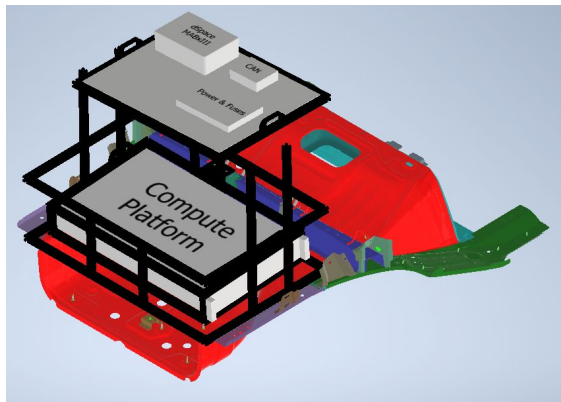
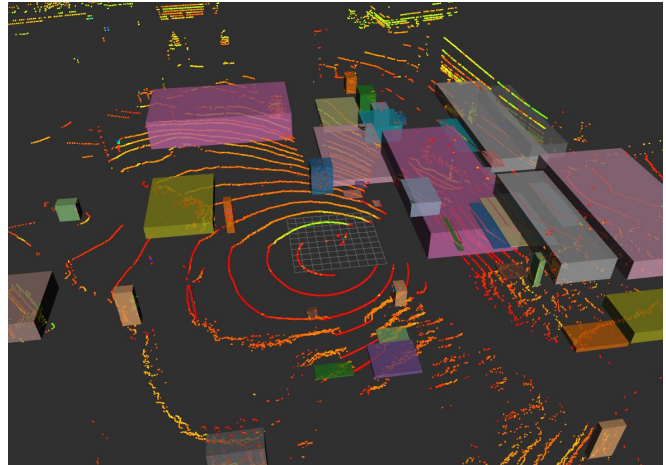




# AUTODRIVE CHALLENGE™ II

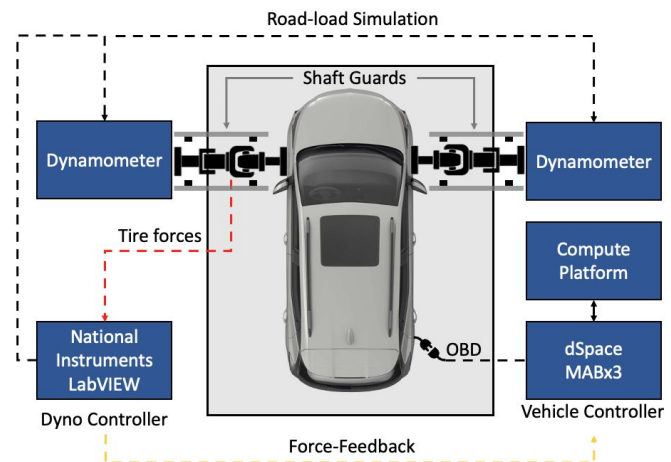
A four-year series aims to have participating university teams develop and demonstrate an autonomous vehicle (AV) that can navigate urban driving courses as described by SAE J3016™ Level 4 automation

**Perception:** A single color camera and LiDAR face forward above the front windshield to classify obstacles and detect exact distances between the car and the obstacle. A highly accurate GPS on the roof detects the vehicle's location within one centimeter.



**Build:** A large server and electronics connections are organized in the trunk area for optimal access and thermal dissipation. The roof rack is reconfigurable to evaluate new sensors.

**Controls:** Testing the vehicle motion in our wintery climate is difficult: the team developed a HiL dynamometer to simulate driving scenarios and tune the vehicle's response, throughout the harsh Upper Peninsula winters.



Learn more with the  
**Robotic Systems Enterprise**

**Info Session: 6-7 PM Oct. 17th in EERC 809**

More information at [rse.mtu.edu](http://rse.mtu.edu)