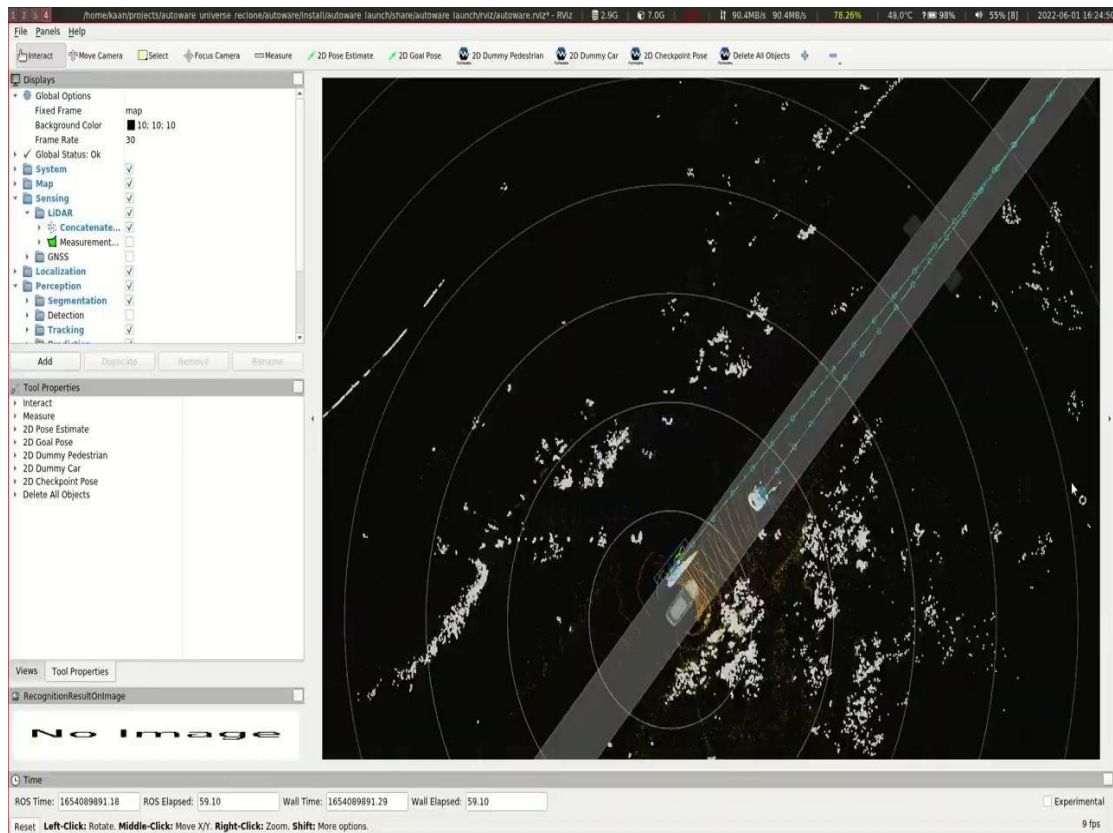# Leo Drive Autoware Integration Update 20.07.2022
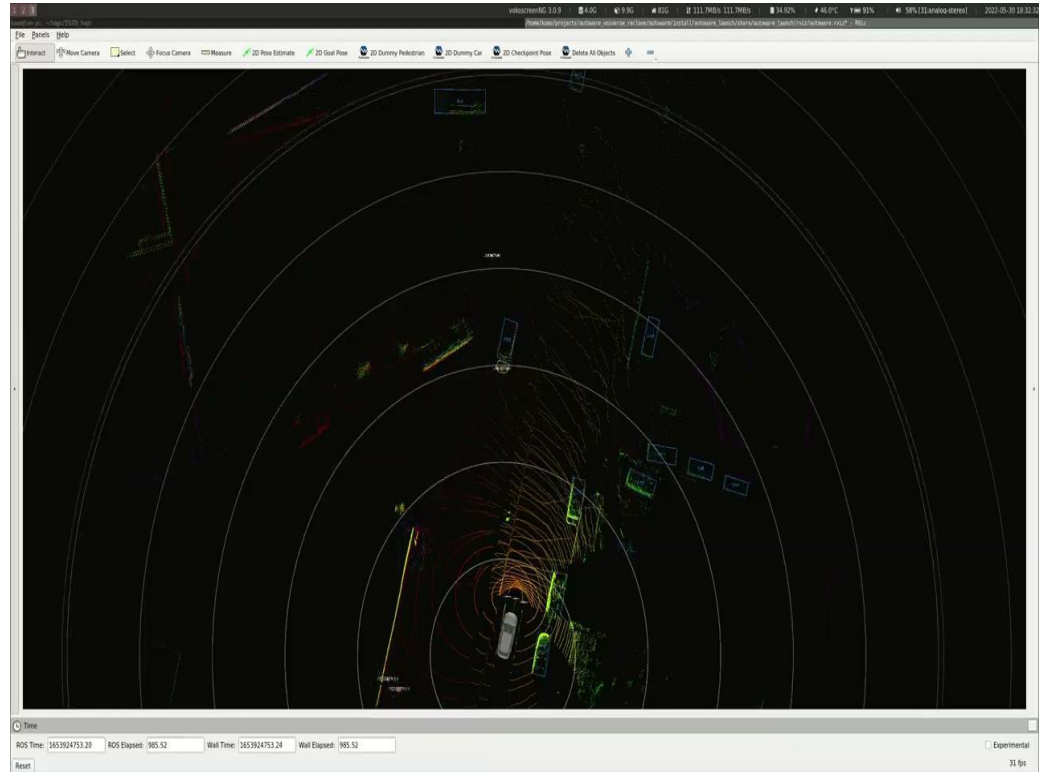
Perception

1. Integrated LiDAR Detection and Tracking pipeline
2. Integrated LiDAR and Camera Detection and Tracking Pipeline
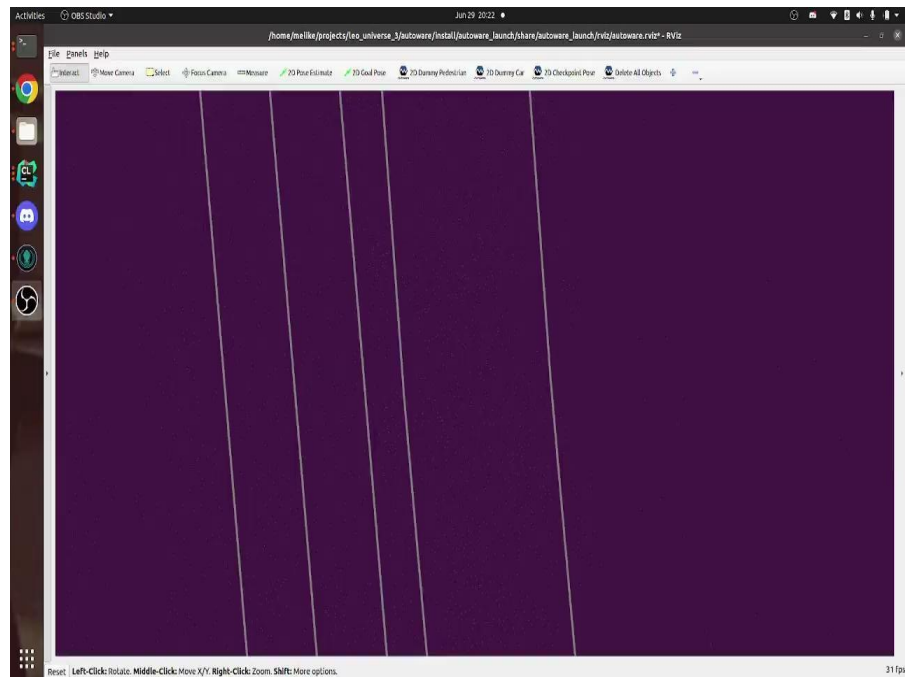3. Started to test traffic light recognition

Perception

Perception

Localization

1. Localization pipeline has been integrated
2. Testing NDT with 3 LiDARs
3. Start to test EKF with GNSS/INS today

# Planning & Decision Making & Control

1. Testing essential modules such as obstacle avoidance, lane following etc.
2. Improved velocity planning module by considering steering rate
3. Developed a speed bump module
4. Fine tuned longitudinal controller
5. Fine tuned lateral controller (Tested both Pure Pursuit and MPC algorithms)

Planning & Decision Making

Planning & Decision Making
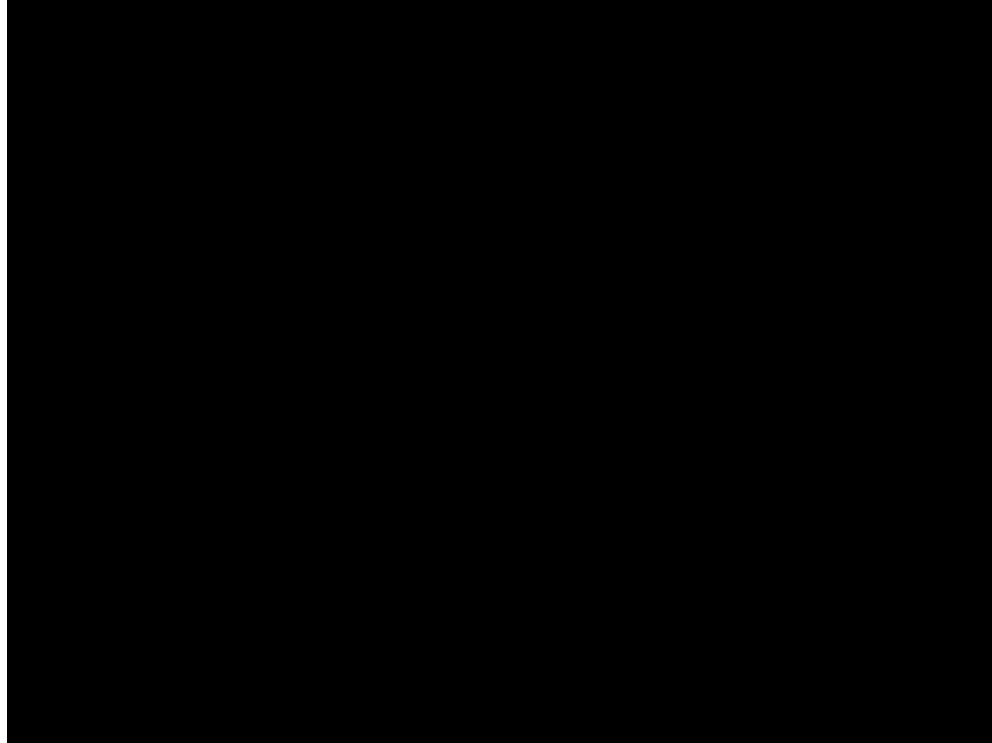
Updates

1. Starting data sharing with the community (maps, sensor data, vehicle parameters etc.)
2. Add additional scenarios to Bus ODD
3. Starting working on an UI as an alternative to RViz2 (https://foxglove.dev/)