



# Annotation on Camera Images and Lidar Data

*For a leading global autonomous vehicle data provider*

## CLIENT BACKGROUND

The client is an expert in providing support to global companies in the field of Autonomous Driving, Advanced Driving Assistance Systems (ADAS) and Active Safety development worldwide. They are focused on producing high quality datasets for AI with the help of world's leading autonomous vehicle data platform that empowers engineers on a daily basis to accelerate the development of safe perception for autonomous vehicles.

## BUSINESS CASE

The client was looking for a partner to annotate dynamic objects from Camera and LIDAR data to generate reliable and high-quality AI training data for ensuring the performance of autonomous vehicle perception systems.

## SOLUTION & METHODOLOGY

With its Image and Lidar annotation expertise, RMSI annotated dynamic objects such as vehicle, vulnerable vehicle, pedestrian and animal present in the 2D camera images using 2D Bounding Box tool and objects that were present in 3D Lidar scenes were annotated using 3D Cuboid Bounding Box. With its Image and Lidar annotation expertise, RMSI is annotating the dynamic objects such as vehicle, vulnerable vehicle, pedestrian and animal present in the 2D camera images using 2D Bounding Box tool and objects that are present in 3D Lidar scenes are annotated using 3D Cuboid Bounding Box. Our annotation experts are capturing the

annotated feature classes with attributes and providing high quality output data to the client for training their AI datasets.

Key steps of the annotation process included:

- Creation of different type of classes as per the specification
- Uploading of 2D camera image and 3D Lidar data in annotation application
- Identification of objects in the 2D camera image and annotate them using 2D Bounding Box
- Identification of objects in the 3D Lidar Scene and annotate them using 3D Cuboid Bounding Box
- Assign the labels to the annotated objects in 2D as well as in 3D view

## CLIENT BENEFIT

- This high quality labelled HD Map data will help the client in accurate anticipation of various objects such as vehicles types, pedestrians and animals while creating automated driving systems
- Using these training datasets the autonomous car must be able to both localize itself in an environment and identify and keep track of moving objects

### Example 1

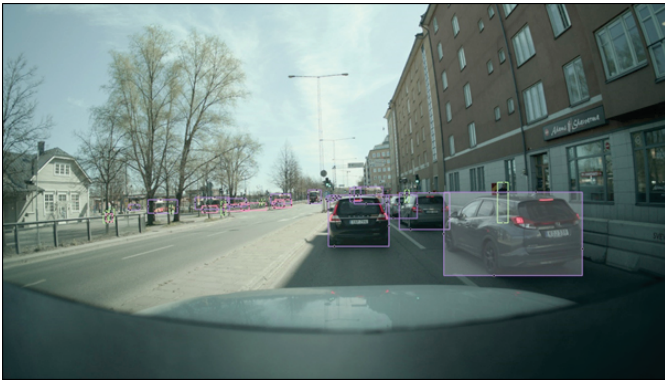
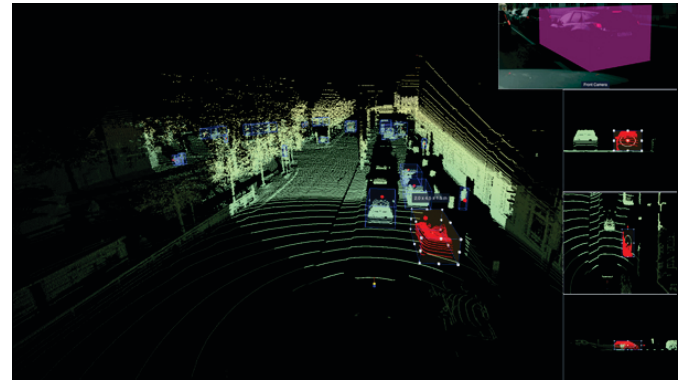


Image Annotation (2D Bounding Box)

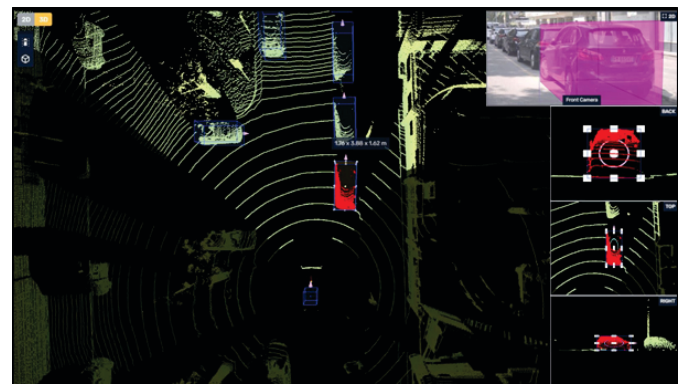


Lidar Annotation (3D Point Cloud View)

### Example 2



Image Annotation (2D Bounding Box)



Lidar Annotation (3D Point Cloud View)