

Sensor Fusion - 3D-Objects

17 April 2022 20:13

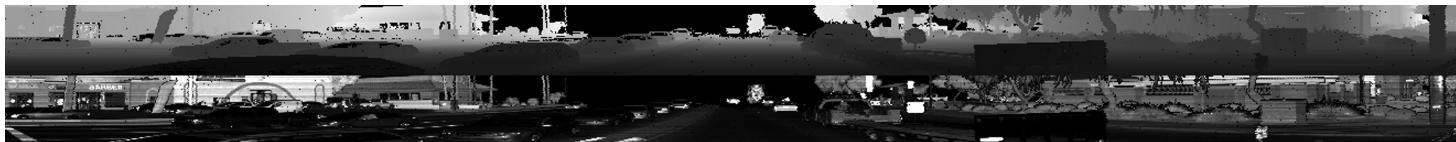
Compute Lidar Point-Cloud from Range Image

Visualize range image channels

The Tasks were done:

Convert range image “range” & range image “intensity” channel to 8bit

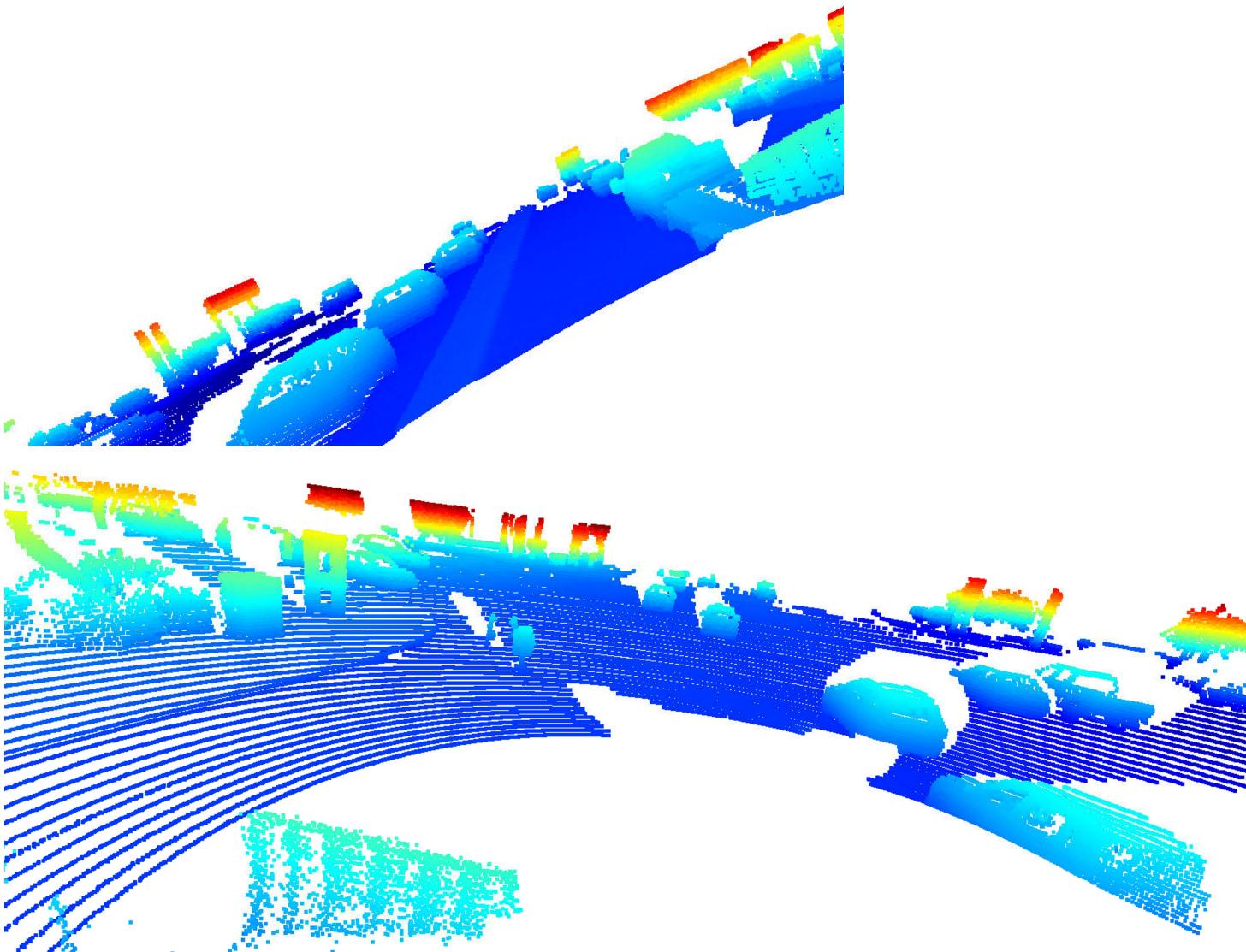
Image are cropped to +/- 90 deg. left and right of the forward-facing x-axis

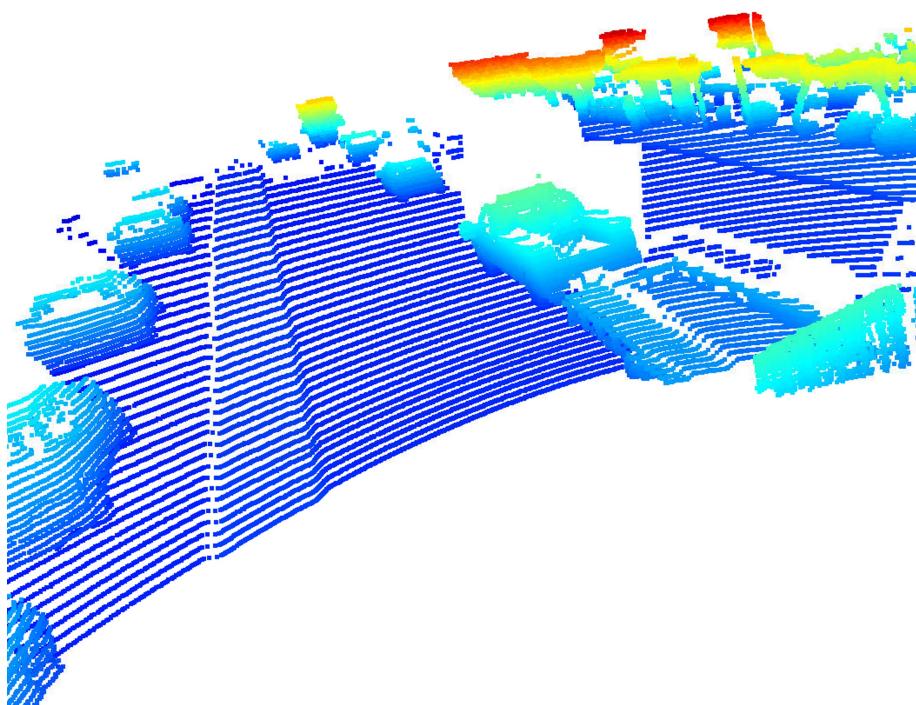
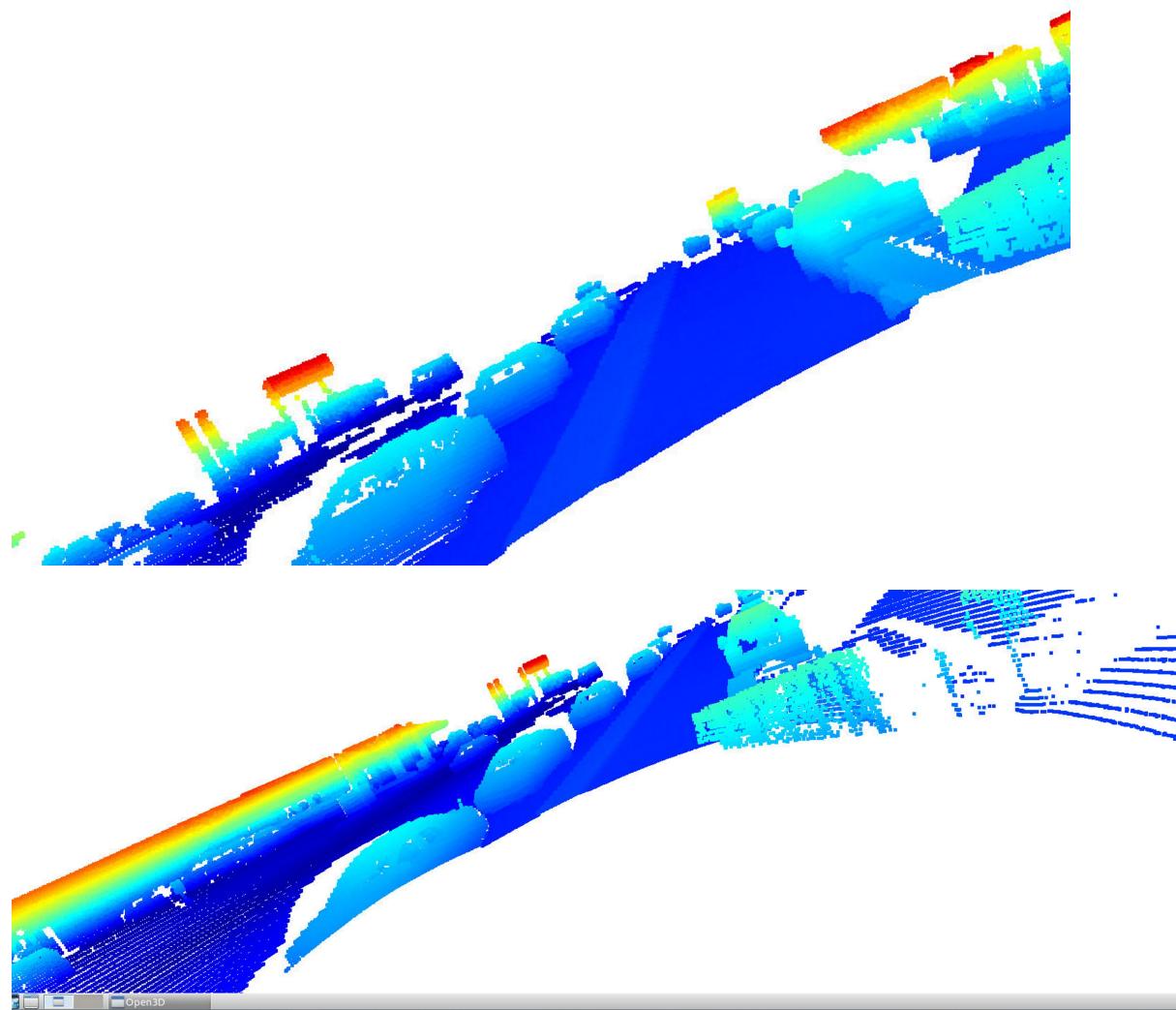


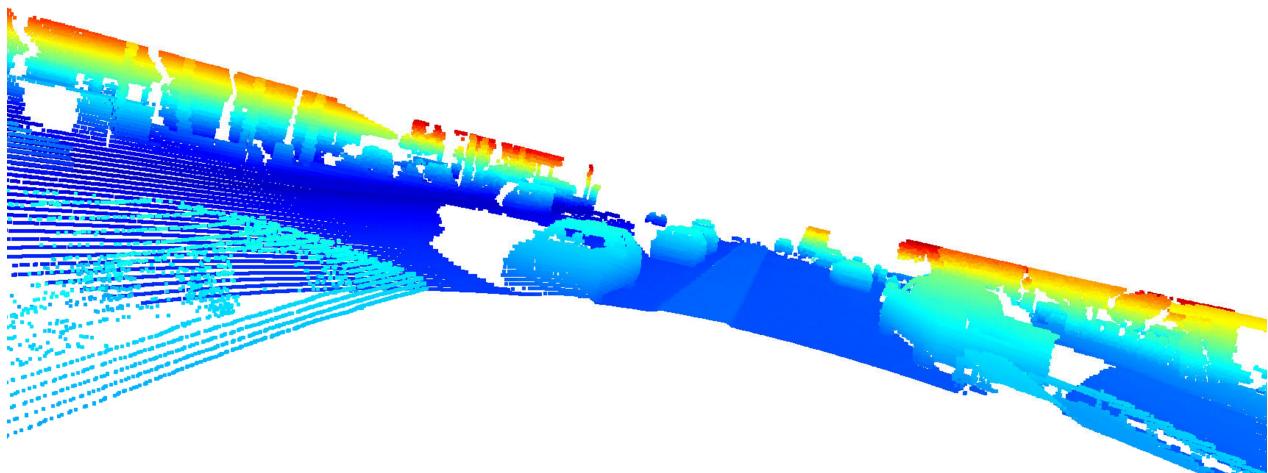
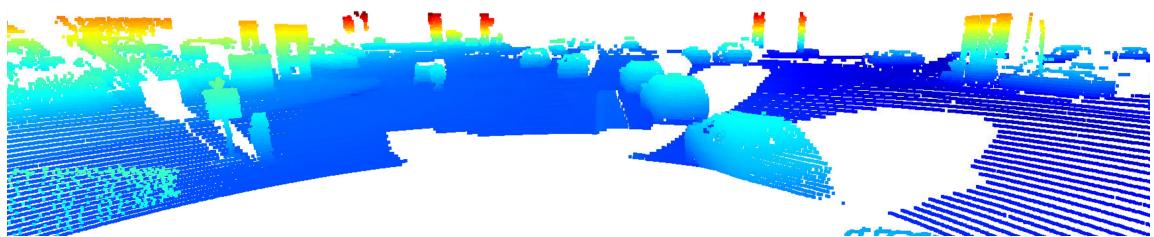
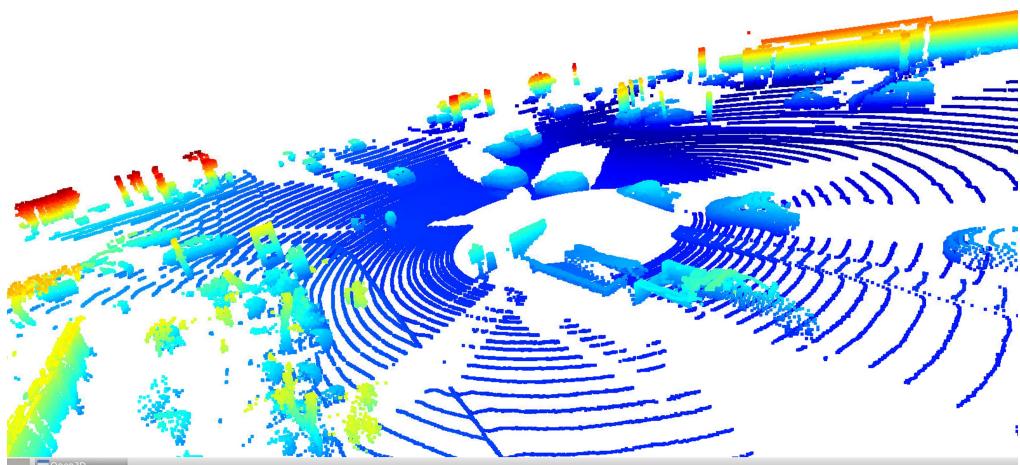
Visualize point-cloud

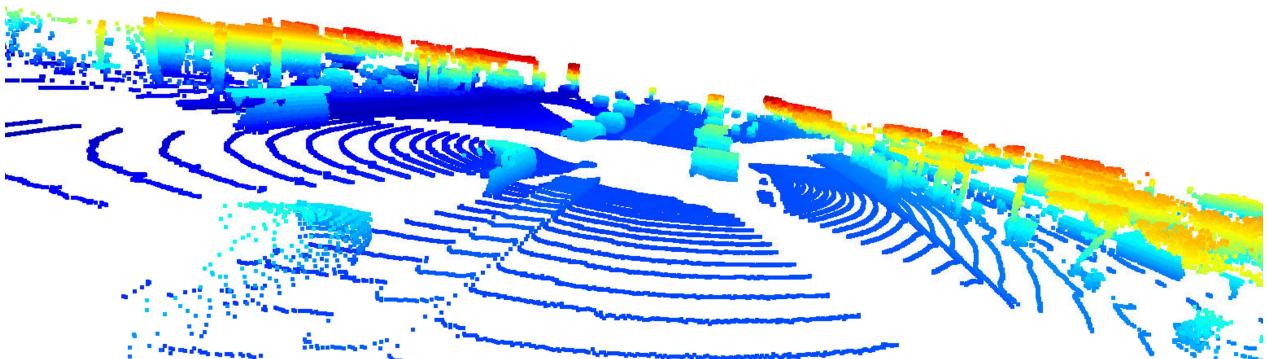
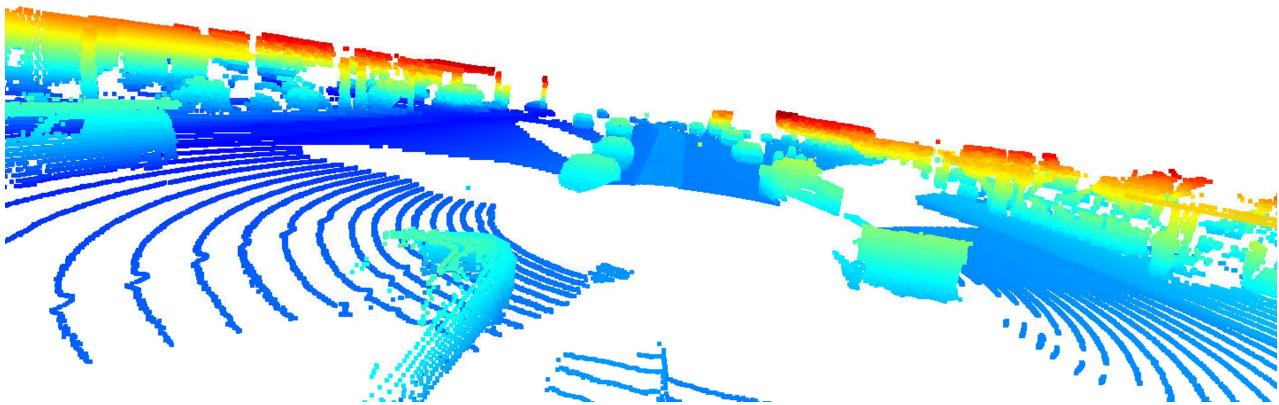
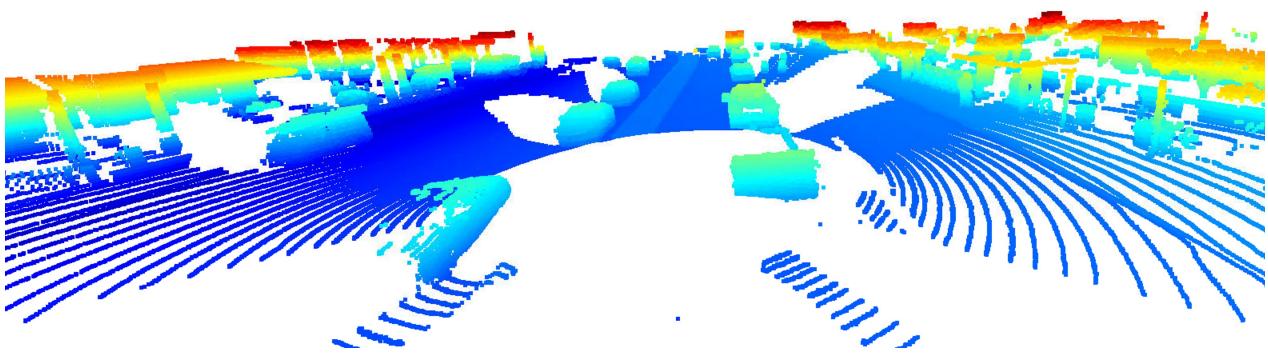
In this exercise, cars are identified in Point cloud with different features.

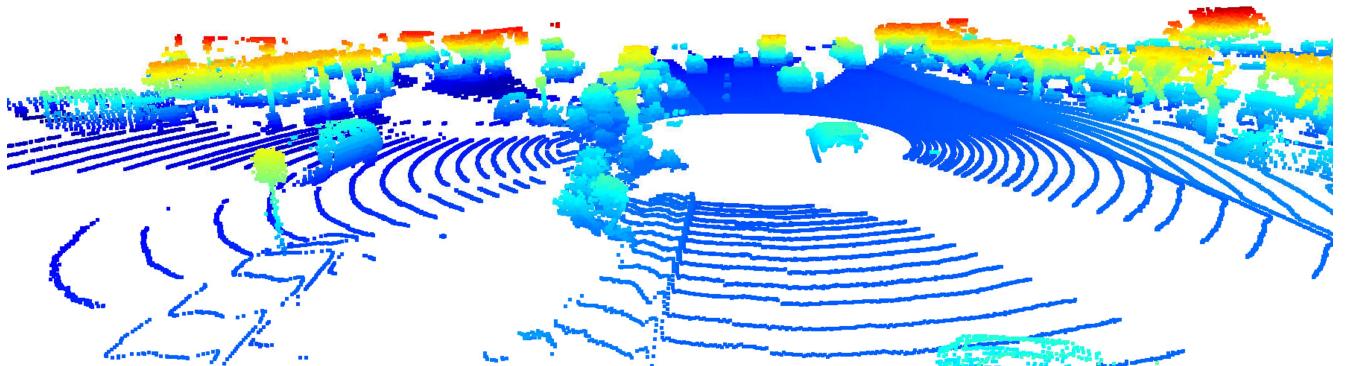
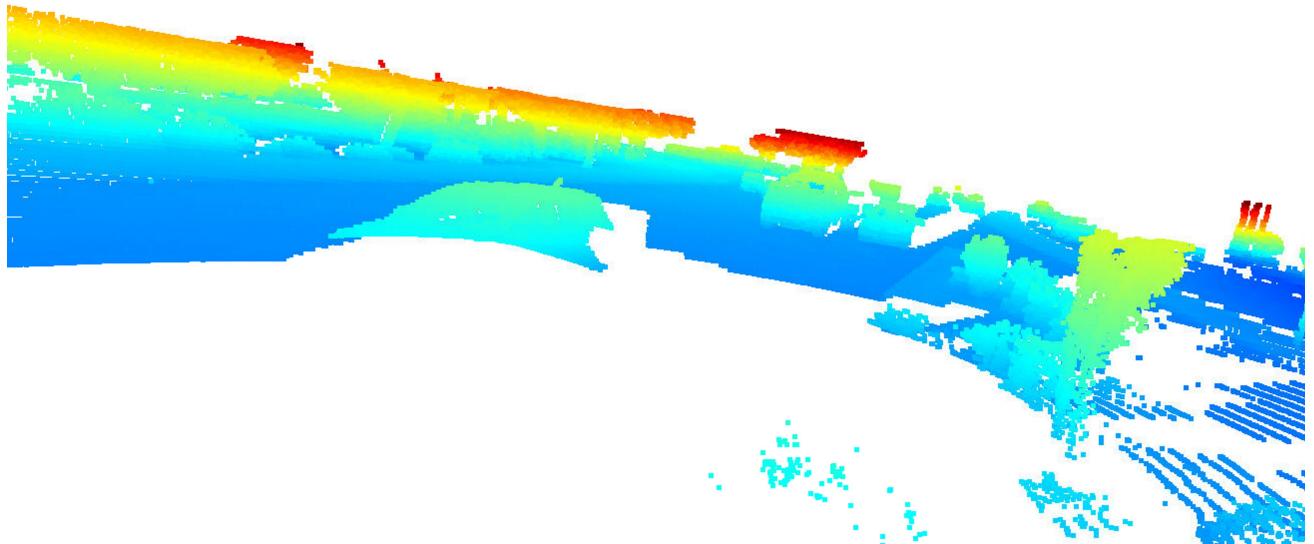
Tires are stable features



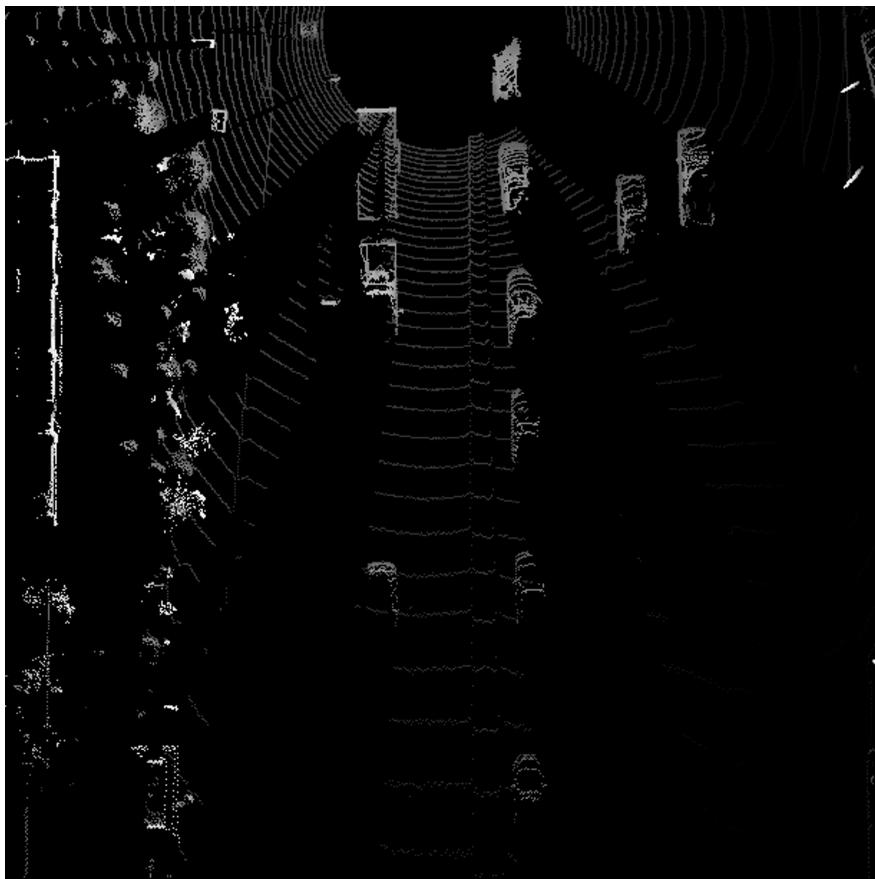




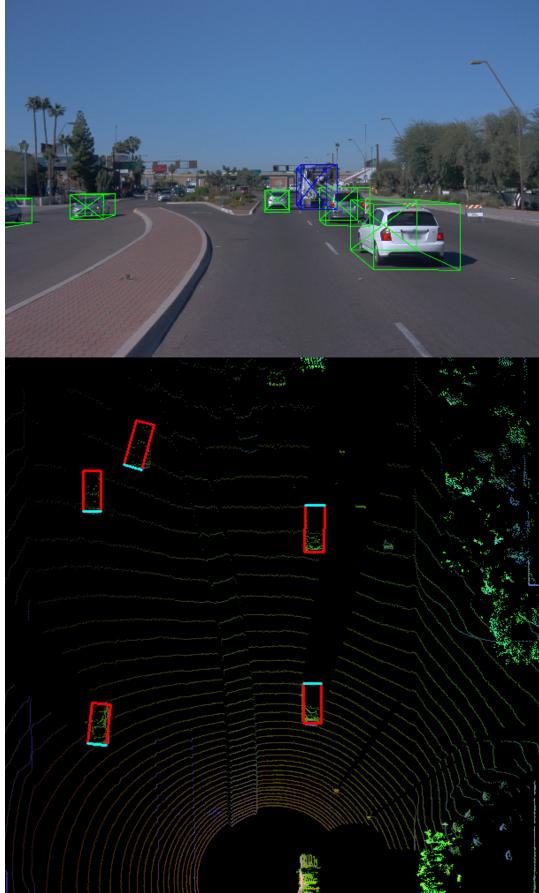




Birds-Eye View from Lidar PCL



Model-based Object Detection in BEV Image



Performance Evaluation for Object Detection

Performance metrics results

