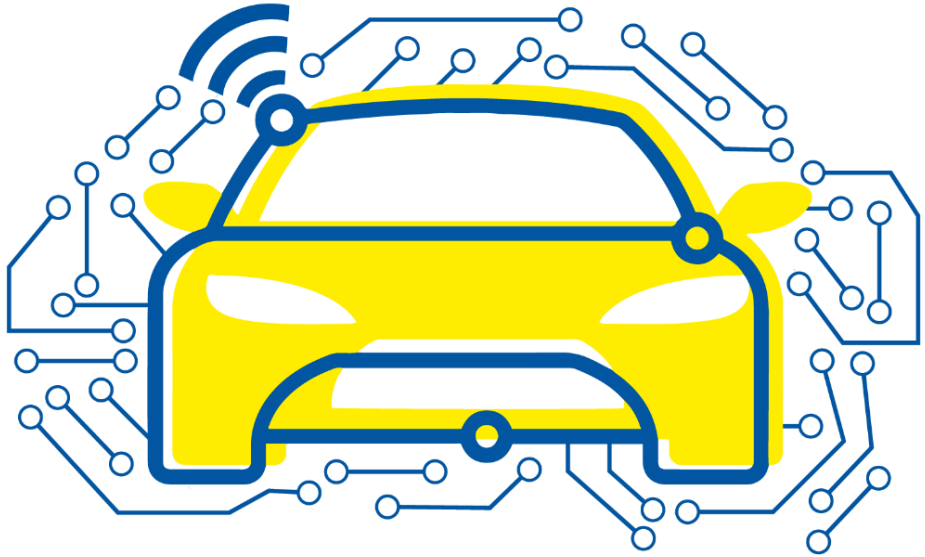
Automated and Connected Driving Challenges

Section 2 – Sensor Data Processing

Point Cloud Occupancy Grid Mapping

Tasks



Bastian Lampe

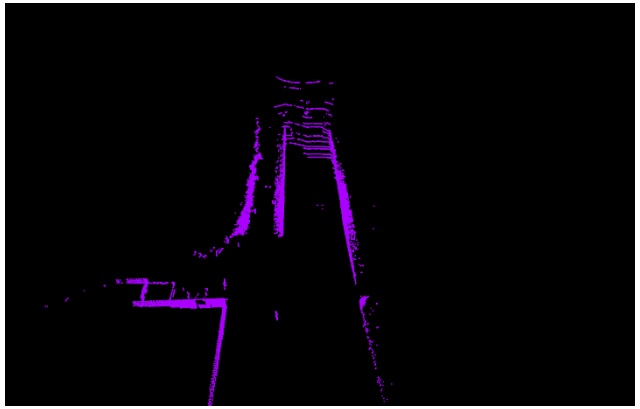
Institute for Automotive Engineering

Point Cloud OGM – Tasks

Geometric OGM

- Task 1 & 2:
  Filter ground points from lidar point clouds using a ROS Node

- Task 3:
  Complete a geometric inverse sensor model in a C++ ROS Node



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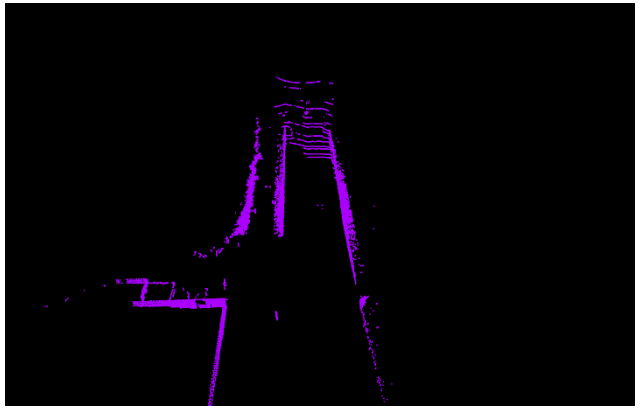
Point Cloud OGM – Tasks

Deep Learning-based OGM

- Task 1 & 2:
  Filter ground points from lidar point clouds using a ROS Node
- Task 3:
  Complete a geometric inverse sensor model in a C++ ROS Node
- Task 4:
  Train a deep learning model for occupancy grid mapping
- Task 5:
  Adjust a C++ ROS Node that uses the deep learning model for occupancy grid mapping



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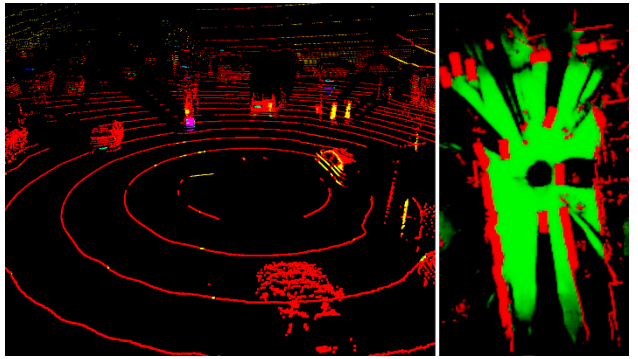

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