project

1. multi-robot task assignment problem. (# = 1)
2. object tracking using optical flow (#=2)
3. object detection using lidar point cloud. (#=3)

multi-robot task assignment problem

project ideas/requirements

- input: an initial graph and a final graph.
- goal: create step by step movement.
- constraint: collision avoidance
- visualization: online
- basic requirements: 2D
- bonus: 3D

object tracking using optical flow

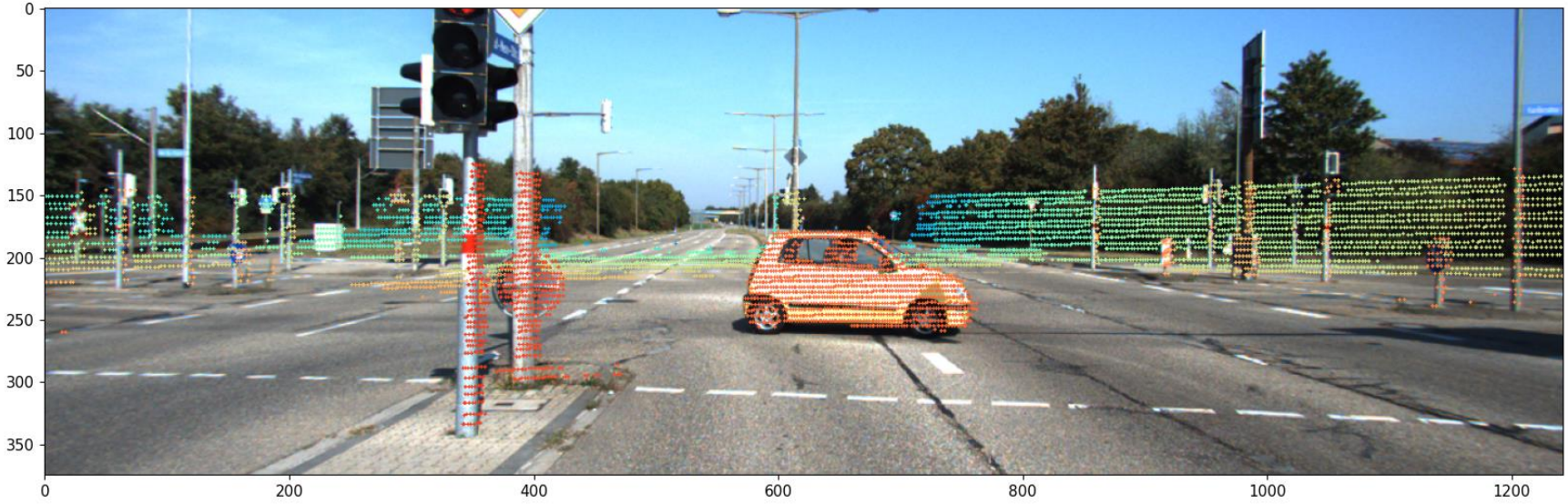
Lidar object detection

- one example of public dataset

  KITTI dataset:

  ”https://www.cvlibs.net/datasets/kitti/”

Video Courtesy: Inside Science


0
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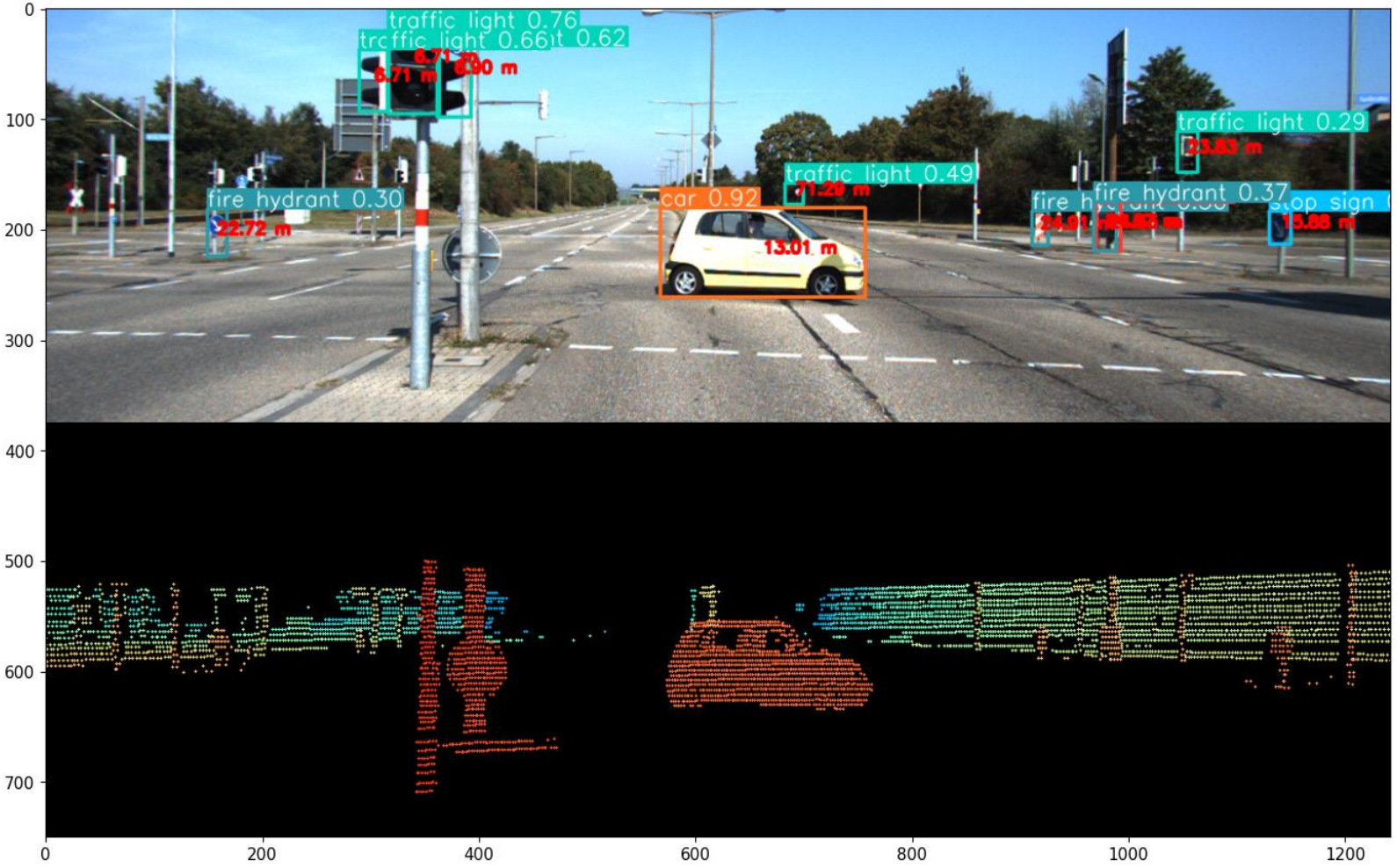
traffic light 0.76
traffic light 0.62
fire hydrant 0.30
22.72 m
car 0.92
13.01 m
traffic light 0.49
71.29 m
traffic light 0.29
fire hydrant 0.37
15.88 m
0
100
200
300
400
500
600
700
0
200
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600
800
1000
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