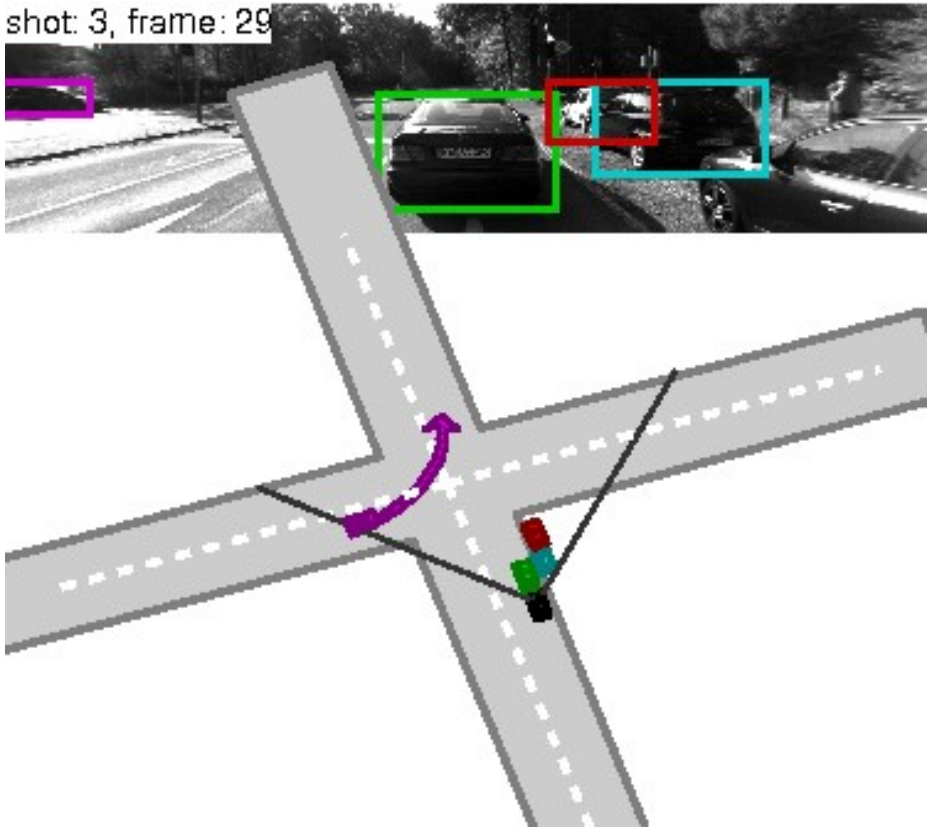
Work done

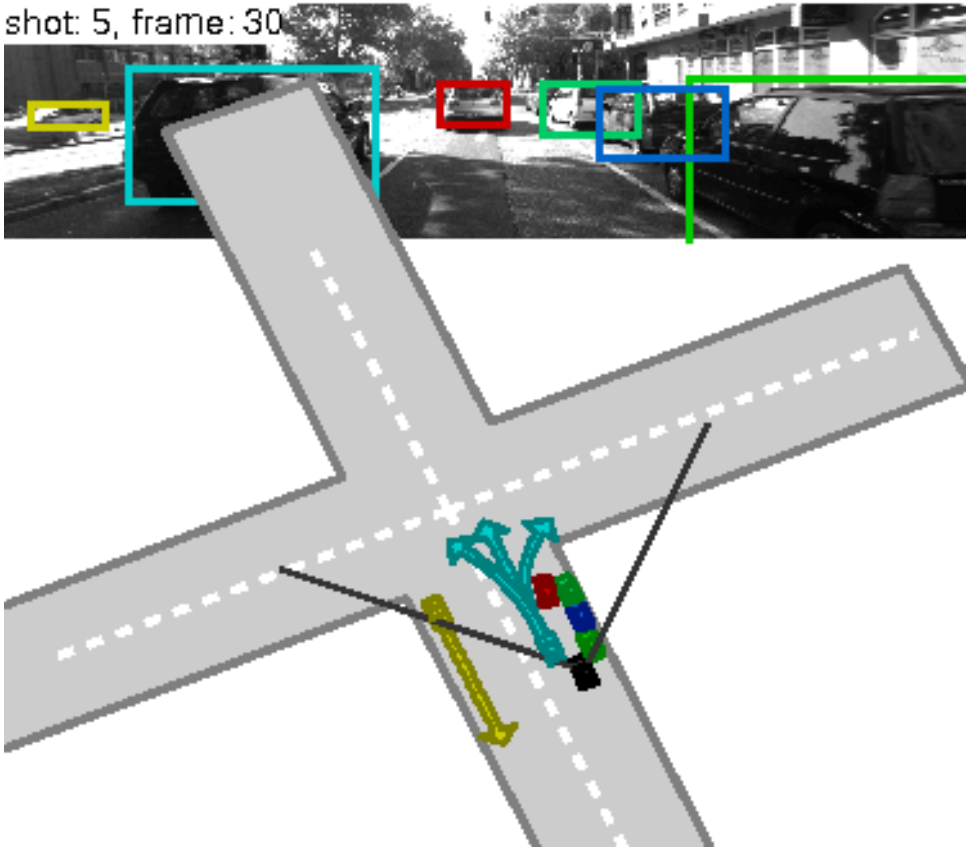
- Geiger PAMI 2014:
- Combine various source of information to estimate Road geometry and traffic participants

- Wojek PAMI 2013: Use monocular cam with occlusion handling for pedestrian tracking.
- Brubaker CVPR 2013: Localizes traffic participants within a given map.
- Flint ICCV 2011: Uses manhattan world constraints to efficiently reconstruct indoors with monocular cam.
- Milan PAMI 2014: Uses Gaussian occlusion for differentiable objective function.

Work done

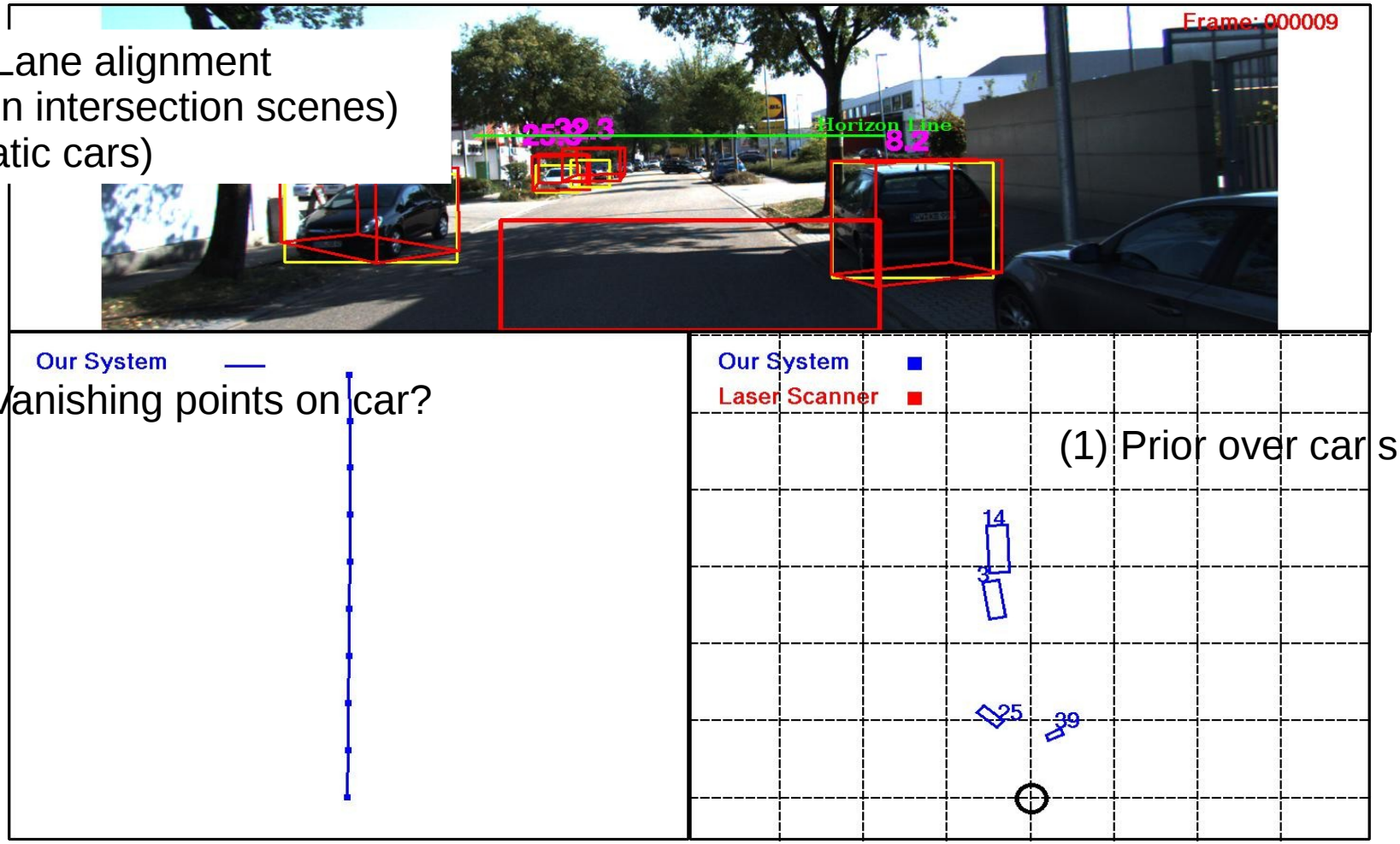
- Ran Geiger's code:
  Observation: There are very few collisions in the results.



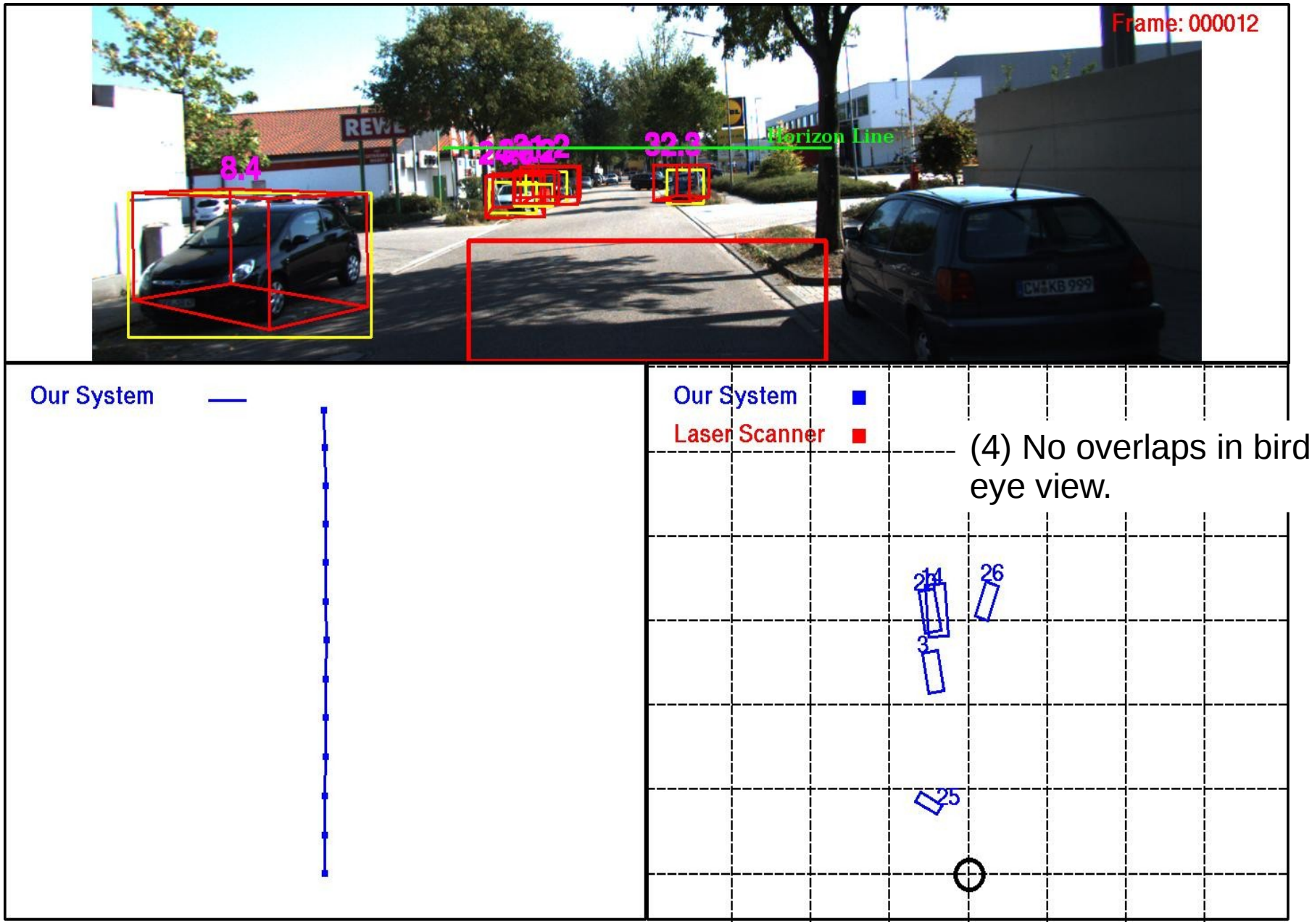


Possible heuristics to fix 3D localization

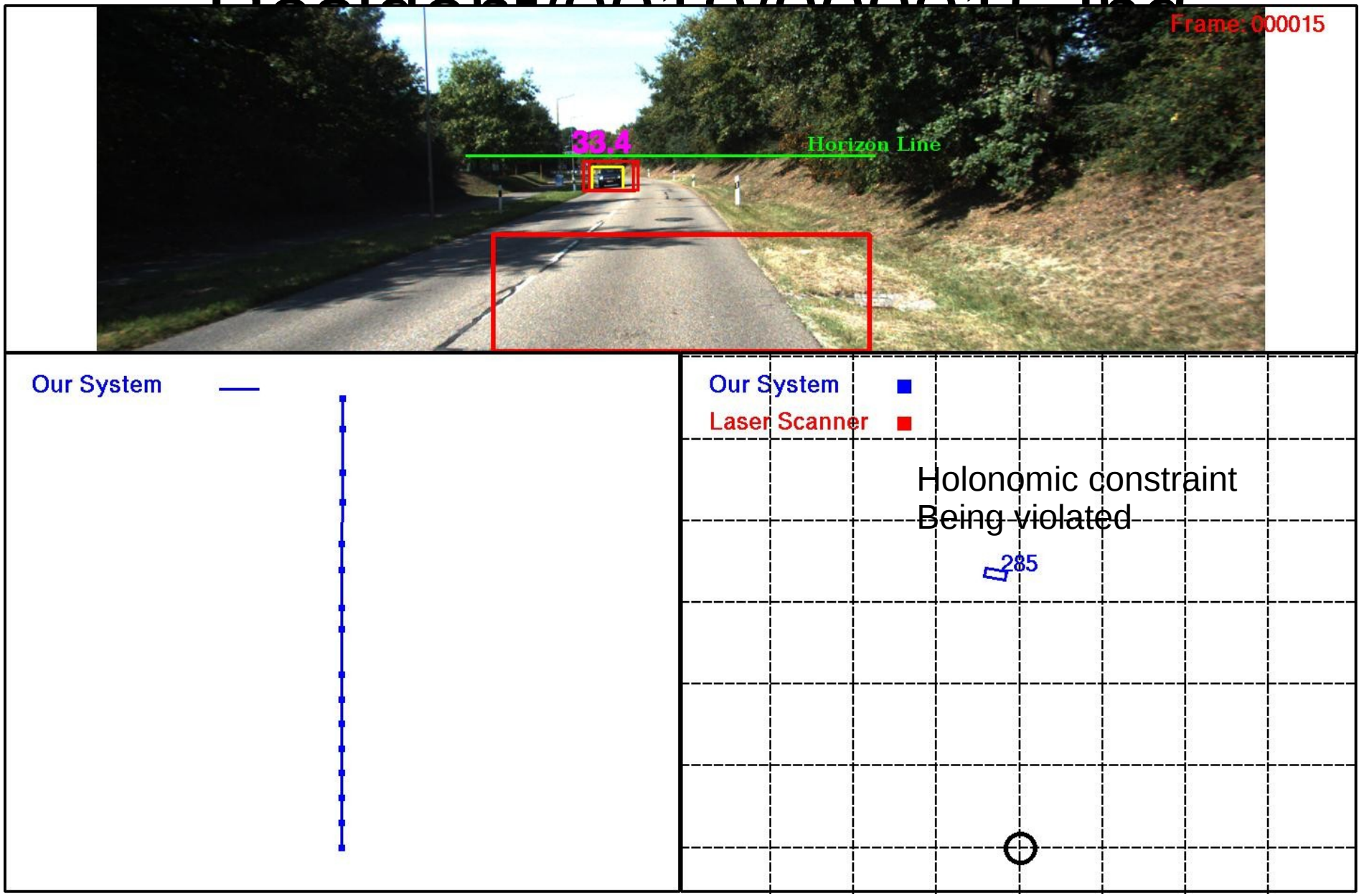
(2)Lane alignment
(non intersection scenes)
(static cars)



Detector pose is not being used (0009)
- @manu



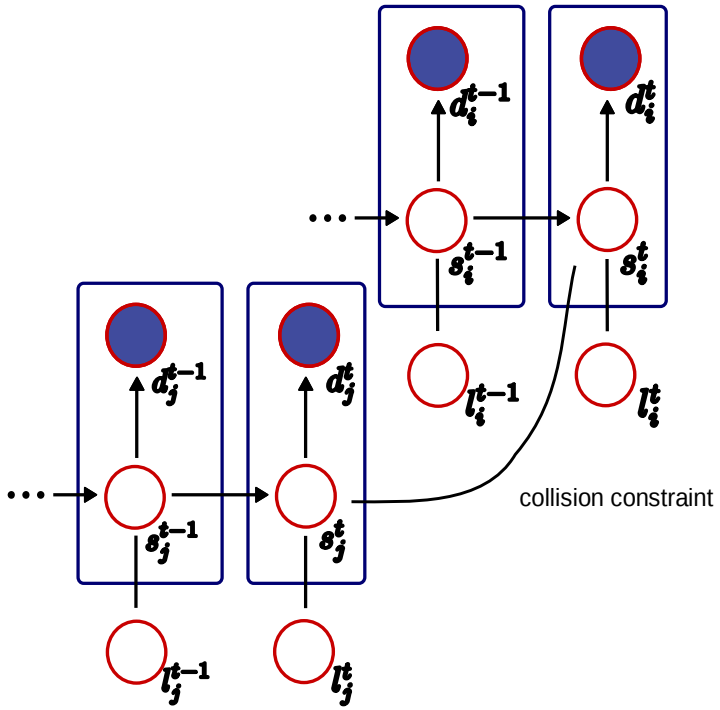
(4) No overlaps in bird eye view.


Frame: 000015
33.4
Horizon Line
Our System
Our System
Laser Scanner
Holonomic constraint
Being violated
285

Plans

- Start with Geiger's model and assume lane geometry is given.

Our Model



Geiger's Model