EL2320 Applied Estimate

Project Proposal

Group members: Hongsheng Chang – changh@kth.se

Sifan Jiang – sifanj@kth.se

So far, autopilot has become a very popular subject in recent years. In autonomous driving, computer on the vehicles need to know the location of the car in the street and build the map at the same time for further control algorithm. This is why SLAM is needed. In this project, we will try to do SLAM with EKF and use the Málaga Stereo and Laser Urban Data Set [1] for simulation. Then if we have time, we would try different algorithm like PF and MCMC.

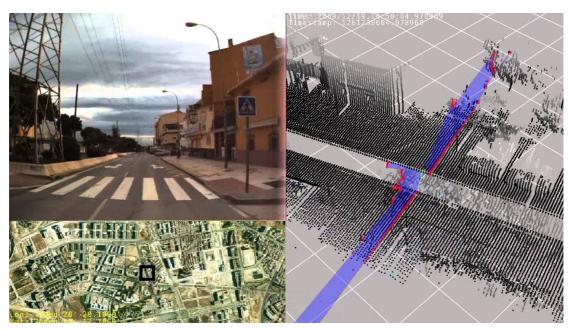


Figure 1 preview of Malaga Urban Dataset [2]

- [1] https://www.mrpt.org/MalagaUrbanDataset
- [2] https://www.mrpt.org/wp-content/uploads/2013/10/malagaurbandataset.jpg