RET PROJECT: DEEP LEARNING-BASED MONOCULAR DEPTH ESTIMATION

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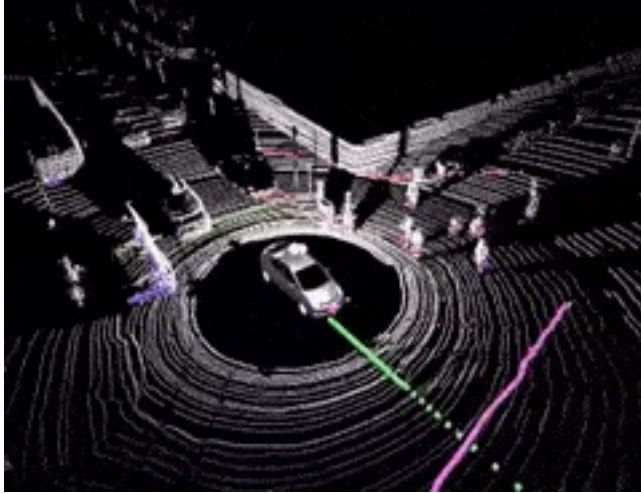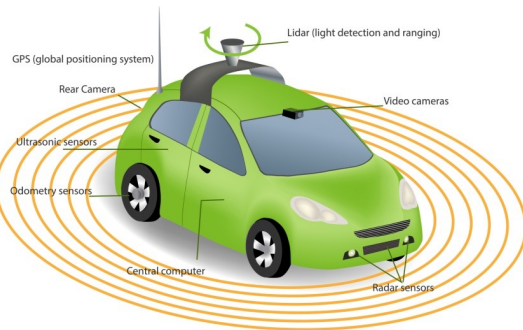[1] Sonoran Science Academy Tucson [2] SenSIP Center, School of ECEE at ASU

Problem:

- 3D environment is essential in autonomous driving

Current Studies:

- Deep Learning-Based depth estimation
- Monocular cameras-Dynamic
- Multi-view cameras -Static
- No need for LIDAR depth values
- Effective methods are limited within a dataset

Seq=07, KF=395

Keyframe

Our Study:

- Combining strengths of previous studies
- State of the art results
- Large scale reconstruction
- Effective in other datasets: KITTI, Oxford Robot-Car
- Camera as lead sensor

Depth Map

MonoRec