Scene Ontology reconstruction and creation using arbitrary stereo/video

Computer Vision (CS6350)

TPA - 7

1 Problem Statement

Scene ontology includes identifying the objects with their location and properties, map the environment and links between them, for describing the scene. One of the ways in which scene reconstruction can be done is through stereometry or panorama. Given the left and right stereo images, 3D scene has to be reconstructed on which scene ontology has to be generated. A graph-type arrangement can be the representation of a scene ontology.

2 Input

- A pair of stereo image

3 Output

- Reconstructed 3D scene

- Scene description and representation

4 Datasets

- Visual Genome Dataset

- KITTI Dataset

- NYU Depth v2 Dataset

5   References

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