**For details related to sections, refer the template page**

Section 1:

Literature findings related to synthetic dataset:

* The paper “Synscapes: A Photorealistic Synthetic Dataset for Street Scene Parsing” talks about domain shift. Domain shift is evident when the DNN trained on synthetic images is used for inference on real world images or vice versa. This problem is researched in many directions. One way is to develop more accurae imaging sensor simulation and variation. Synscape authors have done some work related to this issue. Every dataset have unique characteristics, hence when DNN pretrained on particular dataset should be finetuned on the other dataset if we intend to use the new dataset. For example, there is a significant domain shift between KITTI and Cityscapes, which e.g. can be seen in the differences in dynamic range and local contrast in the images, as well as in the density of car instances.
  + **Open Question – does it mean if 2 datasets acquired in same city but one has more car density and other doesn’t fail to detect the cars beyond a threshold?**