24_to_27th_April_Update

I am looking into the following tasks:
1) Edge Detection
2) Image Segmentation
as they are more closely related to the depth estimation task performed in the previous inferences.

The main factors based on which I am searching the models are:
1) Presence of BatchNorm2d layer to apply approx division
2) Performed on a well defined dataset
3) Ample benchmarks to compare with
4) Well defined error metrics
5) Availability of pre-trained model (preferred)

After looking into many models and implementations having tanh as the activation layers, I found that there weren't enough benchmarks and well defined error metrics for most of these implementations.
Hence I am looking into models having BatchNorm2d that can be replaced and also satisfying the above parameters.

I am looking into the following paper currently: Dense Extreme Inception Network: Towards a Robust CNN Model for Edge Detection -> which is an edge detection task, recently published last year.
The github repo for the paper is here: https://github.com/xavysp/DexiNed#pytorch

Currently, the implementation has not mentioned how exactly the error metrics are computed. So I am looking into that.
The three common error metrics used in edge detection problems are : AP (Avg Precision), OIS(Per image best threshold), ODS(Fixed Contour Threshold)