

CS676A - Assignment 3 (Group 1)

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We obtained the results by changing 2 parameters:

1. The level of tree
2. Branching factor

Link to all result images:

<https://drive.google.com/open?id=0B1Y4inhbx3CzQkdwUzhDcGhNYWc>

The result obtained are as follows:

We tried 2 branching factors and 5 levels for 750 training images with corresponding 250 query images. The three levels (5,7,9) were taken on a different dataset and (6,8) on other.

Max Level	Branch Factor	Correct classify
5	4	49.2
5	6	79.6
7	4	81.6
7	6	89.6
9	4	85.6
9	6	90.8

Max Level	Branch Factor	Correct classify
6	4	55.8
6	6	80.1
8	4	80.5
8	6	81.3

We can see the trend that:

- 1) As max level increase the accuracy increase.
- 2) As branch factor increase the accuracy increase.

Overall, accuracy increases on increasing the number of leaf nodes.