

Computer Vision Final Assignment

By Prof. Wonjun Hwang

1. Submission Due: **June/25 (Thu), 18:00**
 - No late submission
2. Submit the following things to Ajou BB Assignment menu
 - Report_ID.pdf (PDF only)
 - A single Zip file for the following files (Do not include data and the common shared files)
 - (1) Modified m files
 - (2) All mat files at ./result/ directory
3. Constraints for quick developing the object classification
 - Not allowed the additional visual features except PHOW feature -> **PHOW feature only**
(No CNN, FV (FisherVector), VLAD, etc)
 - Not allowed the ensemble methods -> single classifier only
 - Not allowed using additional database such as PASCAL VOC -> Caltech 101 training data only
4. Quick install the baseline code
 - install matlab to your desktop PC (don't use matlab online, it takes too much time for training)
 - download vlfeat library from <https://www.vlfeat.org/install-matlab.html> and install it
(just copy to your target directory)
 - run 'run_caltech.m' on the matlab GUI
 - > It will automatically download Caltech 101 database
5. Final report should include:
 - The final accuracy at Caltech 101 test set
 - Draw the brief structure of the proposed classifier and describe the main purposes of the individual blocks
 - Point out your main contribution using this main figure
6. The baseline method comes from
 - The detail descriptions on the baseline method at <https://www.vlfeat.org/applications/apps.html>
 - The provided code is modified from the above baseline method slightly.
 - It shows 67.58% accuracy in the large test set (Not tiny) of Caltech 101
 - It takes only 533 sec in Intel i7-6700K 4.00GHz (Not using GPU)