

Assignment:

GMM-UBM Speaker Identification

Task:

The task is to use the GMM-UBM Emotion Classifier demoed in class, and modify it to work as a speaker identification system for the same corpus (RML Database).

Results:

You should present results for more or less the following:

1. A number of k-fold validations e.g. 5
2. GMM components sizes: 16,32,64,128 (256 if you can)
3. Using deltas in your feature extraction, or not using deltas.

Report:

You should write a very short report of not more than 5 pages, which includes a description of your code, and the presentation of your results. Suggested graphs for presenting your results are:

1. Box-and-whisker plots to show variance in recognition error over different folds, and for all experimental conditions (GMM size, deltas).
2. Error curves for different experimental conditions, with an appropriate colour legend.

Comment on these results, in light of the theory that was discussed in class.

Deliverables:

You should submit the report, as well as the python code used to generate the results claimed.

Deadline: Friday 28th April