

REU Report Meeting Week 6



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Topic

- ▣ One shot recognition

Experiment Goal

- Train on Caltech 256 categories
 - 30607 Images
- Test one-shot on Caltech 101
 - 9146 Images

Caltech 101 Images

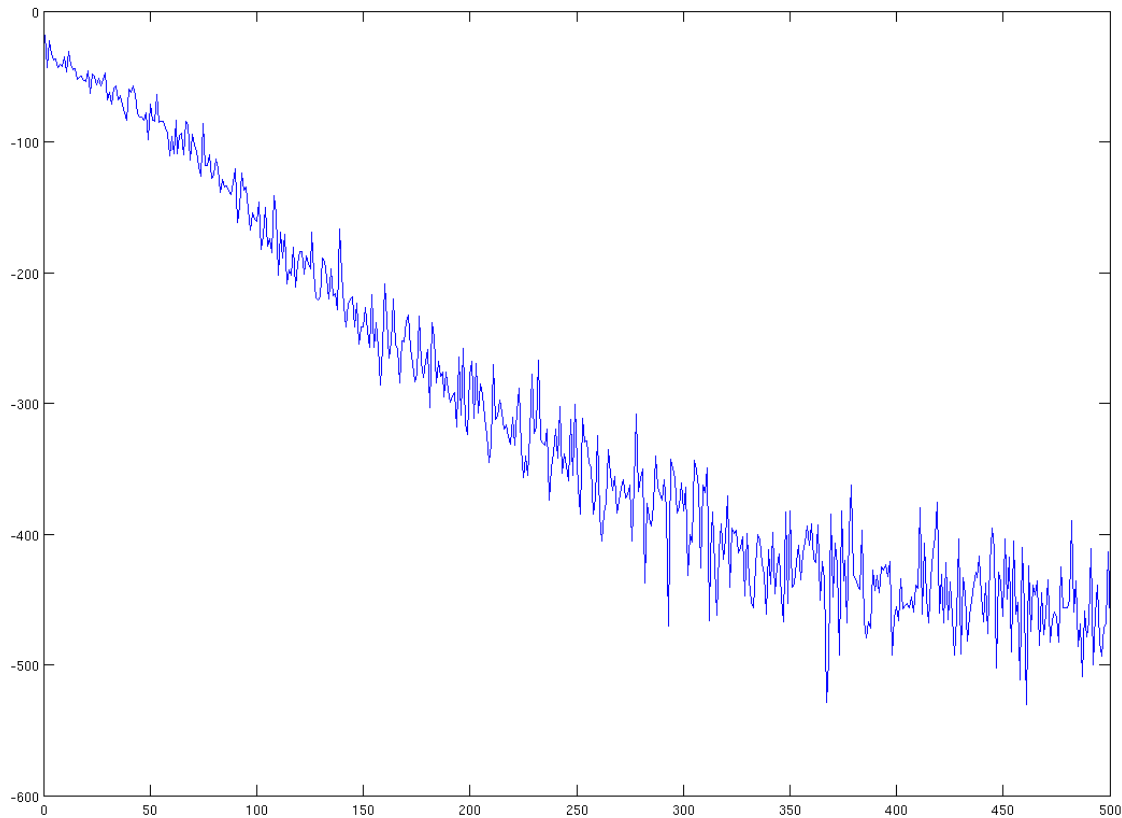


Procedure

- Normalize features and perform Principle Component Analysis on 226 unique categories of Caltech 256
- Train Classifier on the 500 features generated
- Using the previous PCA, transform Caltech 101 features
- Perform a one-shot learning task

Some Results

- 500 iterations, 0.01 Step, 1 test, 10 train



Some Results

- Results consistently in approximately 7-9% mean accuracy range
- Optimization weakly affecting output

Areas to test and improve

Suspect there is most likely some error with current implementation of the final one-shot classification task

Also in question, optimization dimension reduction