

This software implements LDG dimensionality reduction as described in section 2 of the paper, “Dimensionality reduction by local discriminative Gaussians” by Nathan Parrish and Maya R. Gupta.

The folder ‘data’ contains 3 of the datasets used in the experiments section of the paper.

Before you run the experiments, you will need to compile the four mex functions. Do so by running

```
mex DiscMeansVars.cc  
mex LocalGaussobj.cpp  
mex MeansVarsforQDA.cc  
mex objfunc.cpp
```

from the MATLAB command line.

The script titled ‘example’ runs an example experiment using the Ringnorm data with 500 training examples. In addition to transfer LDG, the example also runs PCA and FDA.

If everything runs properly, you should end up with a figure that looks something like this:

