**mnist.mat** stores the pixel data from the raw dataset.

**mnist\_conv\_masked.mat** stores the convolutioned image by applying the 16 kernel masks.

**training\_testing\_partition.mat** stores the partition of a 5-fold cross validation.

**mnist\_cv\_logistic\_conv\_test.m**

**test1.m** to **test5.m** does the 5-fold cross validation for each partition. For scalabitiy, we have to run each fold on separate processes, hence the program is separated.

trans\_feature\_conv.m transfers the original pixel maps into convoluted features.