You know the rules from the previous problem sets. This one is due in two weeks from now (Friday Oct 16).

Problem Set 3

Lecture 8: Recreate the figures in slides:

Slide 30, use the data in **`pa.wav`** and **`shot.wav`**. The output after the detection won't look too clean, smooth and exponentiate it so that the gunshot peaks are clear

Slide 46, use the data in **`one.mat`**

Lecture 9: Recreate the figures in slides:

Slides 32, 33, 34, use **`contourf()`** for the decision boundaries, just sample the space

Slide 53, use the data in **`face2.mat`**

Lecture 10: Recreate the figures in slides:

Slide 39, 42, you should use MATLAB's **`quadprog()`**, don't bother with the arrows and labels

Lecture 11: Recreate the figures in slides:

Slide 24, use the **`contourf()`** function for the decision boundary

Extra credit: Use the image in **`pool_train.png`** to train a classifier that finds pools in **`pool_test.png`**. You are free to use any MATLAB toolbox.

Enjoy!