

## Lab Assignment #1 (Part II): An Algorithm for Voice Recognition

ECE 565, Spring 2008

(posted Fri, Feb 29; due in class Thu, Mar 6)

### **Problem 1:** *An algorithm for voice recognition*

While you have made good progress with the spectral analysis of the voice recordings, you have not yet developed a functioning algorithm for voice recognition. Building on your previous work, develop such an algorithm. Structure your project as follows:

- (a) Define and describe a procedure that allows you to decide whether a given algorithm (a DSP system) is able to recognize (identify) a known voice out of a number of other voices.
- (b) Define and describe (verbally) an algorithm (a DSP system) that recognizes a known voice.
- (c) Translate this verbal description into a mathematical system description.
- (d) Code this algorithm.
- (e) Demonstrate that your algorithm fulfils the specification that you gave in (a).