

Memo to: EELE 477 Students
From: R.C. Maher
Date: January 14, 2018
Reference: Memo Report Format

Header:

Include a simple, informative header on your report.

To: Prof. R.C. Maher
 From: Your Name
 Regarding: Lab #X—*Lab Title* (Put lab number, then title)
 Date: January 22, 2018 (the date the lab was performed, not the due date)

Summary:

The Summary is intended to be a complete description of the lab experiment, but written succinctly for a knowledgeable reader. Choose your words carefully and *engineer* your summary to be brief, but effective.

Typical Main Body Organization:

- It will generally be *much more time efficient* if you write up your lab as you do the lab and generate the figures. This way you won't have to do things twice: just embed the images in your lab report as you create them.
- Answer **ALL** questions beyond Section 2 (Warm-up), which will typically be the Exercises and Lab Review Sections. USE COMPLETE SENTENCES so that the memo report is self-documenting without referring back to the lab procedure.
- **Clearly label all parts of each question (3.1.a, 3.1.b, etc.) in the memo.** If a particular question doesn't require an answer, i.e., it asks you to “play a sound,” just put **N/A** next to the question part. However, if you are asked to “comment on what you hear,” you should write down your comments. **You will not get credit for sections that are not clearly labeled.**
- If an exercise tells you to measure something from a plot, **give the evidence that you actually measured it.** One way to do this is to use the Matlab *ginput* function to get x,y coordinates from the plot. Then use these numbers to draw short vertical (horizontal) lines on the plot and then draw arrows between these lines. Use the *hold* and *plot* commands in Matlab to do this. For example, you will need to do this in Lab 1, section 1.3.1.6. You will need to show how you arrived at a particular measurement starting from the x,y coordinates.
- For lab verifications done outside the lab, have a Matlab *script* ready to run that will automate the presentation process (use the function *pause* to separate items and use the function *disp* to tell what is going on). Have a Matlab file named **run_lab03.m**, for example, if you are submitting code to be checked for lab 3.

- **Embed the figures you create into the write up that are related to the questions.** You can do this in Microsoft Word by creating a text box (*Insert->Text Box*) and then placing the figure into the text box (*Insert->Picture->From File*). You can also format the text box so that text flows to the side (*Click on text box and then Format->Text Box->Layout->Square*), but in any case **make sure the figure is legible!**

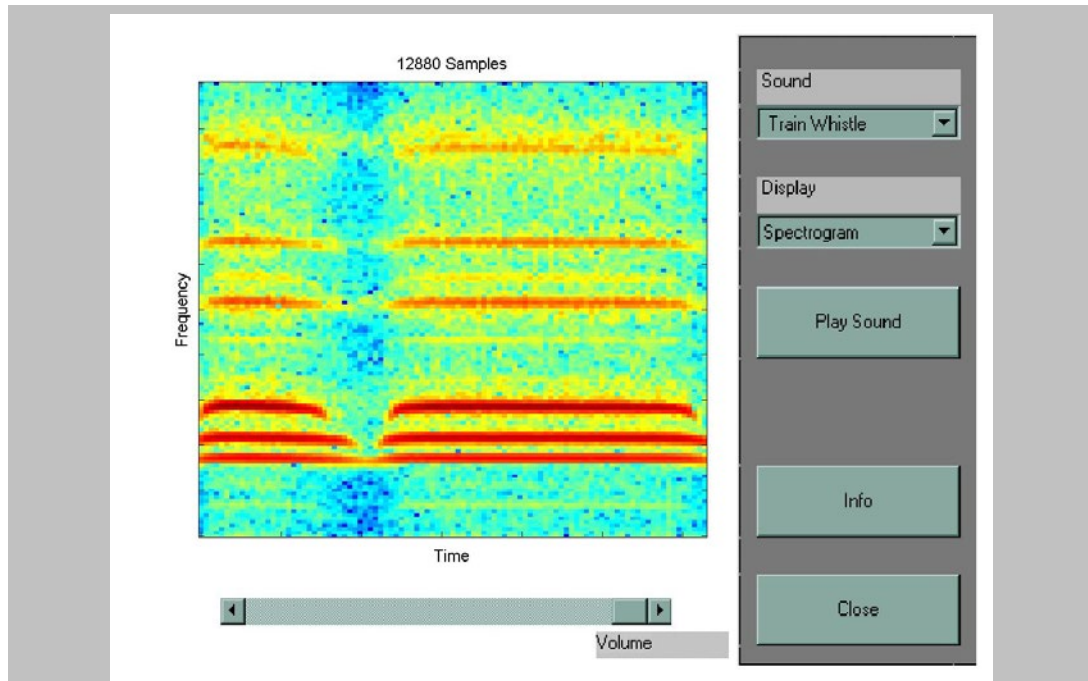


Figure 1. Example embedded image. Visualizing the Train Whistle Sound in Matlab. The sound demo is run by typing `xpsound` at the Matlab prompt.

- **All figures must have captions** underneath them that describe what the figure is. As a general rule, all figures in the text should be self-contained: you should be able to understand what is going on in the figure by just looking at the figure and reading the caption.
- Place print-outs of your code in an appendix and **clearly mark what section & problem number(s) the code was for.** The code should be well commented.

Concluding Section:

If you wish to expand on the Summary given at the top of the memo, a concluding section might be given. You could entitle it simply *Conclusion*, or *Recommendations for Further Work*, *Summary Comments*, or any other title that tells what the boss is going to see when reading the conclusion. Remember, the goal of any written or oral presentation is to communicate effectively.