

## Sonification Lab Programmer Application, Fall 2010

Please take a few minutes to fill out this application. We're asking you about your background and skills. Please do not ask your friends or the Internet for help. When you're done, send it to either: Dr. Bruce Walker, [bruce.walker@psych.gatech.edu](mailto:bruce.walker@psych.gatech.edu), Coon 230; or Benjamin Davison, [davison@gatech.edu](mailto:davison@gatech.edu), Coon 239.

1. What is your name?
2. What is your email address?
3. What is your program of study?
4. When do you expect to graduate?
5. What sort of support do you want from the Sonification Lab? Check all that apply.  
 Volunteer       Credit       Pay
6. Please list the programming languages you are familiar with, from most familiar to least familiar.
7. Are familiar with version control software?
8. Are you familiar with bug tracking software?
9. What Sonification Lab projects would you like to work on?
10. Describe your Java experience.
  
11. What relevant programming projects have you worked on?
  
12. Do you have experience programming with audio? If yes, please explain.
  
13. Are you familiar with sound or perception research? If yes, please explain.
  
14. Do you have any comments?

15. This question asks you to demonstrate your programming abilities. Write in pseudocode or the language of your choice for the following questions. Please show enough work so we can see that you understand the process. However, you can assume that the language libraries provide some basic features, like substring and character access. You may use extra sheets of paper.

You have the task of programming a document analysis tool for text files. We would like to find certain statistics about the document.

a) Find the most frequently used letter in the document.

b) Find the most commonly occurring word in the document.

16. Describe in sentences how you would test your document analysis program.