Intro to Creative Programming
Mengyu Chen

Final Project Goals:

My interest is to recycle all types of “digital trash” and develop the potential of re-using these already deleted or supposed to be deleted useless files. In this project, I would like to work on sound visualization by processing, compressing and modeling sound trashes I collected from hard drives on different computers into a core-shape geometric object. Then I would like to export this “core” of sound into Rhino and 3D print these trashes as objects of art, to build a critical relationship between the trash productions in both virtual and real environment.

Link for sound trash sample work: http://students.risd.edu/students/mchen01/midterm/soundtrash.mp3

Deadlines for Each Work:

1. Write program for 3D Visualization of sound using Processing - November 5
2. Export 3D Visualization into Rhino and re-model for 3D printing - November 19
3. 3D print objects of sound and prepare installation for final critique - December 3

Technical Problems that need to be solved:

1. 3D visualization, how to create a proper shape for the sound piece? How to build my own system of creating 3D models for the sound in processing? How to make each piece of sound looks much different from others?
2. How to export a complete and exact 3D modeling file for Rhino?

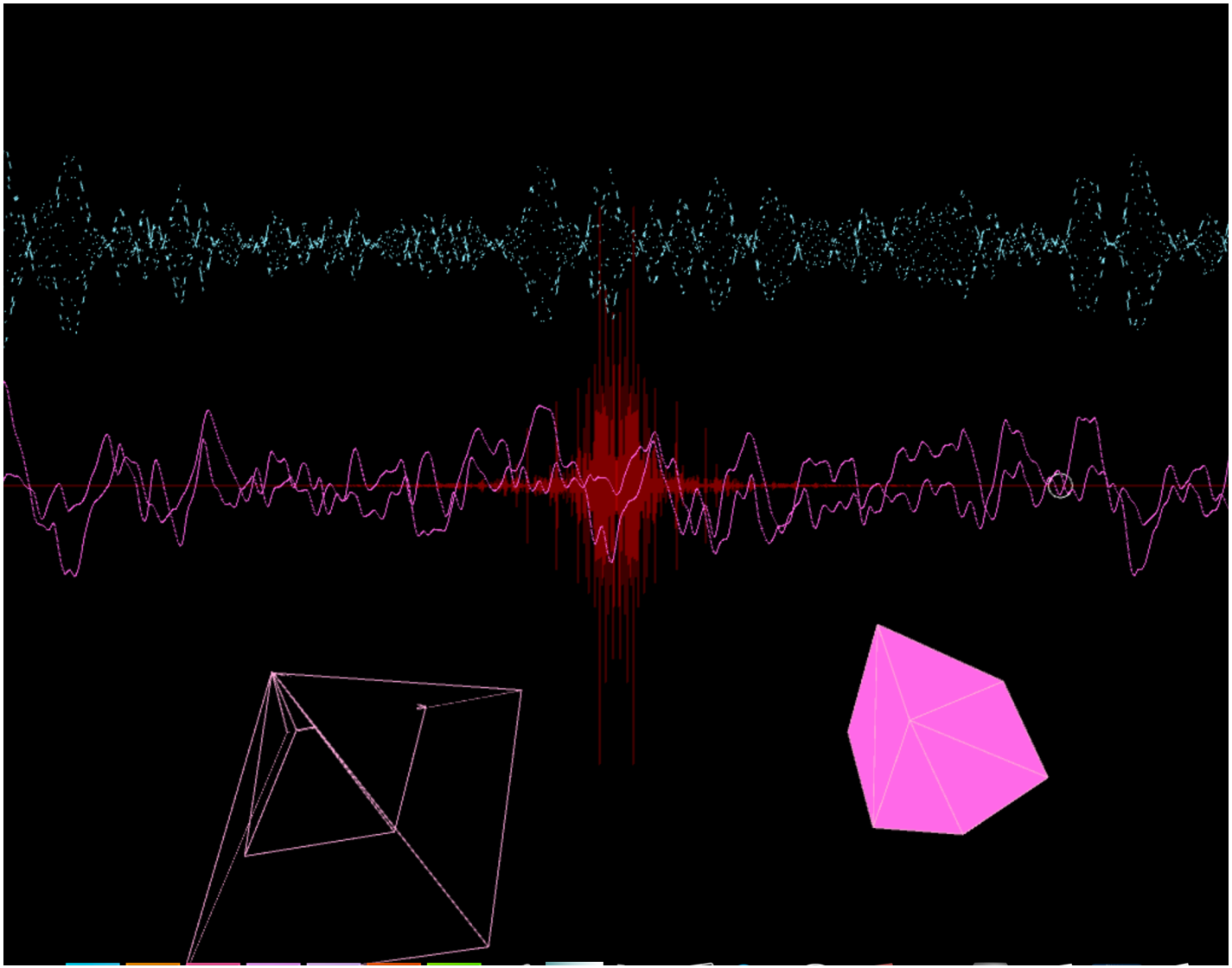
Important functions and methods:

1. Minim Library
2. Processing 3D
3. Rhino and 3D printing

Risks and potential problems:

1. The shape of 3D model generated by processing might be too complicated to be 3D printed, or the 3D printed product might not look good enough (but it’s also interesting to see how trashy it could be)

Screenshots:
1. A basic test of Minim Library, FFT function and Processing 3D drawing



2. A program written by John Locke, with function to export as DXF file in Processing.
   Reference Link:http://gracefulspoon.com/blog/2009/03/06/iggy-wave/