DECO101: Sound Design & Sonification

2010 Assignment 2: Audio Signal Processing for Data Sonification

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Research and Inspiration:

The very first step to do in the assignment was to search for the set of data that could be translated into sound. Knowing that the more fluctuant the data set is the more interesting the outcome sound will be. During the research period which is probably done online I simply realized that the daily activities that taking place on the internet every single day would become an amazingly energetic data record, which I would prefer to divide into 2 categories. Saying that the type of activities on the internet is one component of the data set, and the percentage of users that engaged in those activities is another component. Some examples of the activities would happen on the internet are: sending or reading emails, using search engine to find information, getting news. The idea here is not to show the change in density of these activities used by internet users but to take the randomness of the usages of these activities each day counting by percentage of users to create the random and interesting sound pattern of the internet activities in the day.

The data source can be accessed at:

http://www.pewinternet.org/Static-Pages/Trend-Data/Online-Activities-Total.aspx

Creation in Max Patch

Because of the data I have got which has only one column of data – the percentage of internet users, so I decided to recreate a Max patch from previous year submission that takes one column of data to generate sound even.

The example work that I took is Discover the US CO2 emission in residential and commercial areas (Jiang, 2009), in which, there were two column of data used.

In general, my Max patch was as same as the previous work from Jiang but it uses only column of data (percentage of users), in order to make the patch more interesting, I tried to create randomness in the frequency of the sound so that the output sound would be changed each time the patch runs.
This step is done by create an object named random with the argument of 120 (0 – 120). However, it could be annoying to let the random frequency plays continuously; therefore, I created a button which will be used to enable the random frequency as well as turn it off.