

Creative Computing CO3346 : Sound and music. 2016-17

Introduction

The following two assignments are to enable you to obtain a broader and deeper understanding of specific material in this unit. To obtain the most benefit, you should read widely, rather than just reading enough to enable you to answer the particular questions asked.

You should take this as an opportunity to become expert in an area of the subject than is otherwise possible when only studying towards exams. It is also an opportunity to further develop your creative portfolio.

Academic approach to discussion questions

You are expected to approach the courseworks in this unit in a rigorous and academic way. While it is fine to use internet search tools and Wikipedia to obtain a broad understanding of a topic, it is also essential that you use reliable academic references to obtain your information.

In any essay that you write, you must make sure that you use and cite your reference material appropriately. You can look at the end of any journal or conference paper to get an idea of how to do this. This is a final year unit, and we fully expect students to be able to cite and reference material correctly.

We also expect you to approach the work in an informed and critical manner, to develop an ability to form views based on evidence (substantiating any strong claims that you may make) and to argue in support of your claims.

Creative Computing CO3346 assignment 1 : 2016-17

Sonification of text

There is a strong connection between words and music, both this coursework and the next investigate this aspect. There are many things to look at in this context, and initially you will explore in a broad way and then later the coursework requires you to become more focused, and finally to read and understand particular material.

Part A

First, answer the following general questions about this area in an academically rigorous way. It is essential that your answers are written as complete sentences, in a structured way, and that you cite and reference correctly when appropriate.

1. What is meant by sonification? Give some examples of what this activity might be. [3%]
2. Think about how the concept of sonification might apply to text. Describe what this might be, and give a few examples of sonification of text. [10%]
3. How does the concept of song, and of lyrics creation, link with sonification? [7%]

Part B

The second part of this coursework assignment involves an in-depth investigation of two research papers that are each about a particular aspect of text sonification.

For each of the papers listed below, you are to read them in depth, and present an analytical discussion of the work. This should include a description, discussion and critique of the main ideas of the paper (each in the form of an essay, each a maximum of 2,000 words – you may well find that you are able to present the discussion in fewer than 2,000 words, which is absolutely fine, but do make sure you address all the relevant aspects). You may need to read additional material in order to fully understand the papers, their relevance and any context; this may also be relevant to your critique in Part C.

- ▶ F. Alt, A.S. Shirazi, S. Legien, A. Schmidt, and J. Mennenöh, ‘Creating Meaningful Melodies from Text Messages’, in *Proceedings of the 2010 Conference on New Interfaces for Musical Expression*(2010),pp.63-68.
- ▶ D. Jones and P. Gregson, ‘The listening machine: generating complex musical structure from social network communications.’ in *Proceedings of 50th Anniversary Convention of the AISB, Live Algorithms*(London,2014),6 pages.

[60%]

Part C

Provide a critical comparison of the work in the two papers from Part B. You should take into account the general ideas in the field and bring in your own (justified) comments about what has been done.

[20%]

[Total 100%]

Your submission for all of the above is to be as PDF. Please submit 3 separate documents: the first called *YourNamePartA.pdf*, the second called *YourNamePartB.pdf* and the third called *YourNamePartA.pdf*. Do not put these submissions into an archive; you should upload them as separate files. (*YourName* should be your own names.)

Marks will be deducted from work that is not submitted in the correct format, as specified above. In particular, we do not accept word documents.

[END OF COURSEWORK ASSIGNMENT 1]

Creative Computing CO3346 assignment 2 : 2016-17

The Listening Machine

Based on the work you did for assignment 1, you are to develop a system or artefact that explores an area related to sonification of text. In the first assignment you read two papers; one of them described the work of Jones and Gregson, in creating *The Listening Machine*.

1. Use the paper by Jones and Gregson as the basis for developing a creative sonic artefact or system. Your artefact does not have to be an implementation of something similar to *The Listening Machine*, or even a part of this (though it may be, if that is what you choose to do); however, it must be linked to or inspired by this work. You need to clearly demonstrate the connections. You must be explicit about the work you are basing the development on, and the links to your artefact or system. Describe what you intend to do, and explain how it is motivated by your work in assignment 1. Also be very clear about how it relates to the broad area of sonification (and, in particular, sonification of text). [15%]
2. Develop the artefact or system, in whatever language or system you feel is most appropriate. Bear in mind that you need to ensure that the examiner will be able to use, listen, or run your artefact, so if you choose something unconventional, you should give clear instructions as to how to use or install any software required.

Make sure you justify your choices and describe what you have done, as well as explaining how your system or artefact works. A significant part of how you will be assessed is on your connecting the research you have read with the work that you then produce.

You should ensure that any code that you develop is clearly commented, and is efficient and appropriate in its approach. You will also be assessed on your creative expression, your ambition, and your clarity.

Finally, it is always a good idea to provide example outputs, if relevant, to demonstrate what you have achieved. [70%]
3. Provide a critical evaluation of what you have done, indicating the successes (and failures, if you perceive there to be any). You should also include a brief section on how you might develop what you have done further. [15%]

For all of the above, you should work in a way that reflects your understanding of how the researchers who wrote the papers that you read worked. Cite any connections that are relevant, and make it clear what has motivated your work. It should be apparent to the reader what you are trying to do, and why.

Submit three things:

- ▶ A report that describes what you have decided to develop as your creative artefact. This should include the rationale for development, and the connection with the work that has inspired what you've done. The file should be called *YourNameBrief.pdf*. [15%]
- ▶ Your creative artwork and any software that you have developed in order to create it. Include sound files as appropriate. If they are large, use an audio compression format, e.g. FLAC or Vorbis (both royalty-free formats). Enclose all of the files for this part of the assignment in a zip file called *YourNameArtwork.ext*. (*ext* will depend on the kind of archiving format you are using.) Please include, in your zip file, a `readme` file giving instructions to the examiner about how to listen to or experience your work. Also include a `technical` file that describes any technical aspects of the development that you wish to bring to the attention of the examiners. [70%]
- ▶ A report that gives a critical analysis of where it has succeeded as an artwork, and where it may be further enhanced or developed. Please call this *YourNameReport.pdf*. [15%]

[Total 100%]

Again, do not combine these three parts into an archive; you need to upload one zip archive of the artefact or system itself (which may contain a range of items) and two pdf files with your written work for this assignment (your description of the artefact you have decided to develop; and your critique of the work that you have then done). **Students whose submissions do not respect the above requirements will have marks deducted.**

[END OF COURSEWORK ASSIGNMENT 2]