

CSC475 Music Retrieval Systems - G. Tzanetakis

WEEK 2 Workplan

The workplans for this course are guidelines about the material to study and the work that needs to be performed between each weekly in-person meeting. They are structured for three different types of course engagement:

- Minimal (*) - just want to pass the course
- Average (**) - good understanding of the material
- Intense (***) - going the extra mile, interested in pursuing graduate studies and learning deeper about the topic

Many of the resources mentioned in this workplan are available at the following website: <http://marsyas.cs.uvic.ca/mirBook/course> I strongly advise that you set aside specific regular time intervals to work on this course every week and stay engaged from the beginning to the end. We move very quickly through some complicated concepts so if you don't stay on top of it you will quickly get completely lost.

Viewing

View the videos 4 (Discrete Fourier Transform, 60 minutes) and 14 (How to conduct a bibliographic search, 14 minutes). Write down at least three questions you have about the material. During our meeting next week I will randomly call students and ask for their questions.

Reading

Read chapter 3 of the MIR book The latest draft is available at <http://marsyas.cs.uvic.ca/mirBook/book/>.

Write down any questions you have and I appreciate hearing from you about any typos, mistakes and more general feedback you have about the textbook.

Look at the papers from the proceedings of ISMIR <http://www.ismir.net/proceedings/>. Sort by year and focus on the second and third year. Pick three papers that you find interesting and read them (***)

Tool learning

Although there is no specific requirement for a programming language/framework for this course I will be providing examples and doing live coding sections using *Marsyas* which is an open source framework in C++ with Python bindings for audio analysis and synthesis with specific emphasis to Music Information Retrieval. You can find more information at <http://marsyas.info>. From last week you should have most of what you need to get *Marsyas* compiled and installed. Look for instructions for how to install and try to do so on your own. During our next meeting we will have a hands-on session and try to sort out installation issues so even if you fail at least you will have everything in place to figure out what the problem is.

Programming

For this week you will be mostly working on assignment 1 so I only provide programming work if you are ambitious. Try to write all or parts of assignment 1 using *Marsyas* with directly in *C++* or using the *Python* bindings (***) .

Project Preparation

The project forms a significant part of this course. It will be done in groups of 2-3 students so it is a good idea to start thinking about it. If you know other students in the course that you would like to work with start contacting them and discussing possibilities. The textbook has an Appendix that has detailed information about possible projects that either other students have done in the past or I find interesting. Another good source of inspiration are papers from the International Conference on Music Information (ISMIR). Practically any paper from that conference can serve as the basis for a project. I am also completely open to new ideas as long as there is some connection to what we will be learning in the course. Take some time to think about it and read about the projects.