TECH350 : Algorithmic Composition
TECH 350 (CRN 8590)
Fall 2014

Course Information

- Time & Location : Mon/Wed 1-2:15PM @ TIMARA Studio
- Instructor : Joo Won Park
- Email : joo.won.park@oberlin.edu
- Phone : 440-775-8232
- Office Hours : Mon/Wed 9-11AM & by appointment

Overview

Algorithmic composition is a technique to compose music with codes (specific instructions for a computer to do a task). We will learn how think and express music in codes and numbers. In doing so, we will have a hands-on experiences on various subtopics such as generative music, artificial intelligence, interactive music and installation, physical modeling, and live coding. The required program we will be using is SuperCollider, but the concept we will learn in the class can be applied to any technologies. The class assumes that you have taken a few semesters of TIMARA classes.

Required Materials

- Computer with SuperCollider installed (download at www.audiosynth.com)
- USB or Portable HD
- Access to TIMARA server
- Access to a recording device and MIDI controllers

Expectations

- Come to every classes with open mind and open ears. Be ready to participate in various exercises and discussions.
- If you miss more than 3 classes without proper excuses, your attendance point will be 0. If you have more than 3 unexcused tardies, your attendance point will be 0. If you miss more than 6 classes, excused or unexcused, you will not be able to pass the class.
- If an emergency or sickness prevents you from coming to the class, please contact me as soon as possible. If you have an incident that prevents you from coming to two consecutive classes, bring proper documentations (doctor's notes, official letter from x, etc)
- You are responsible for all material covered in the class regardless of your attendance record. Please come to my office hour if you need a help in catching up. Late assignments are not accepted.
- Plagiarism and other means of academic dishonor are prohibited. Please refer to Oberlin Honor Code for details at http://new.oberlin.edu/conservatory/academic-resources-and-support/honor-code.dot
- Check your Oberlin email and for updates and notifications. I can be reached much easier by email than phone. Email submission of your work is not valid unless you receive a confirmation reply from me. If you do not receive a reply from me within three days, please resend the email.

Accommodations for Students with Disabilities

Students requesting classroom accommodation should contact Office of Disability Services. Please refer to http://new.oberlin.edu/conservatory/academic-resources-and-support/disability-services.dot for details.

Grading

A+	A	A-	B+	B	B-	C+	C	C-	D	F	W
100-97	96-93	92-90	89-87	86-83	82-80	79-77	76-73	72-70	69-60	59-0	NA

- Class Attendance : 10%
- Annotated Bibliography : 10%
- Homework : 40%
- Midterm Project: 20%
- Final Project: 20%

Annotated Bibliography: There will be a list of books, articles, and music that you will have to read, listen, and summarize. Submit one before Fall Recess and another before Final Exam week.
Homework: These are short SuperCollider assignments to test and experiment with the subjects covered in the classes. Expect a new homework every week except a week before midterm and final project.
Midterm and Final Project: they are composition or research projects using SuperCollider or other approved programs.

Semester Schedule
- September
    - Week 1 : Introduction
    - Week 2 : Intro to SuperCollider - UGens, Functions, Methods
    - Week 3 : Intro to SuperCollider - Randomness, Arrays, Routine
    - Week 4 : Modular Synthesis - envelopes, filters, and samples
    - Week 5 : Generative Music
        - Midterm Project is Assigned
- October
    - Week 6 : Generative Music
    - Week 7 : Models and Simulations
        - Submit Midterm Project & Annotated Bibliography
    - Week 8 : No class (Fall Recess)
    - Week 9 : Intermediate SuperCollider - Nesting, Large-scale works
- November
    - Week 10 : Intermediate SuperCollider - Pattern, Networking
    - Week 11 : Advanced synthesis techniques
    - Week 12 : Installations and Performance System
        - Final Project is Assigned
    - Week 13 : Live Coding
        - Submit Annotated Bibliography
- December
    - Week 14 : Special Topic
    - Week 15 : Makeup and Individual Session
    - Week 16: Final Exam (12/19 @ 7PM) : Final Project Presentation