SMC 2023

Summer School

Program

June 12 MATERIAL
- 09:30 Coffee & Welcome.
- 10:00 General introduction/Information
- 10:15 Presentation of each supervisor and introduction to the different workshops/ working tracks.
- 12:00 LUNCH
- 13.00 SoundWalk workshop in central Stockholm.
- 15:00 Post production according to specification (to be provided). Lilla salen at KMH is available.
- 16:00 AW

June 13 PROCESSING
- 09:00 Track workshop 1
- 10:00 Track workshop 2
- 11:00 Track workshop 3
- 12:00 LUNCH
- 13:00 Project Lab (with supervision)
- 16:00 AW

June 14 PRESENTATION
- 09:00 Project Lab (with supervision)
- 12:00 LUNCH
- 13:00 Project presentations
- 16:00 AW

Detailed descriptions of the workshops on next page

Descriptions

Sounds & Walks

This summer school proposes as a first activity a collective soundwalk workshop. It will take place in central Stockholm, and its aim is to explore different methods for exploring and describing together an urban territory and its multiple atmospheres. We will experiment in particular with synchronised, parallel and multipoint recordings. The resulting materials will later be used for creating a geo-located public soundwalk.
Personal recording devices are welcome!

Algorithmic Spatialisation

In this workshop we explore different ways of working with algorithmically controlled spatialisation, using SuperCollider and the Ambisonics ToolKit library. To provide an interactive layer for gestural control, we will also work with the integration of continuous data streams from various sensors. The recordings made on the first day will be used as source material and a point of departure for our experiments.

Control spatial audio with web camera and WebAudioXML

In this track, we use a web camera and the MediaPipe library from Google to capture body movements, including fingers and facial expressions. The data is mapped to audio parameters using WebAudioXML (WAXML) and can therefore be shared to any device with a web browser and a camera through a URL. The audio generators will be built using the WAXML language that includes various components like granular synths, sample players, oscillators, filters, mixers and envelopes. We will also have the possibility for the body to control the spatialization, both in the 29.4 speaker configuration "Klangkupolen" at KMH as well as headphone monitoring with binaural technology.

Manipulating soundscapes by using sensors

In this activity, students will participate in the creation of an interactive installation in which the soundscapes recorded the day before in Gamla Stan will be used as sound materials. The programming environment will be Pure Data.

Inertial sensors, including those embedded in the participants' smartphones, will be used to select/mix sounds and to manage certain sound parameters such as volume, equalization, and spatialization.

GitHub repository for course material:
https://github.com/mattiaspetersson/SMC-Summer-School-2023