

Academic Year 2021-2022 052483 Computer Music: Languages and Systems

Supercollider Homework 3

Harmonizer effect

Description:

A harmonizer pitch shifts the input signal and add it back to the original un-pitched audio to create a two / three / or more note harmony.

Create a vocal harmonizer and an interface to control it. The input signal could be an analogue instrument (i.e., guitar or bass) or an input voice track.

Using SuperCollider, take ad external input (from a sound card or the input microphone) and add one or two voices creating a harmonization. For example, you can use SuperCollider implementation of pitch shifting and then you can add any effect to the final mix, but feel free to check online resources. However, keep in mind to focus on the harmonizer.

For controlling the parameters of the harmonization or of the effects, implement a user interface in SuperCollider.

Be creative, feel free to exploit interesting solutions!

Output:

- A brief presentation and demonstration of your work that will be given to the class (max 5 minutes).
- A more detailed report in which you illustrate your system and its implementation (max 8 pages).
- A public repository in the general GitHub repository https://github.com/polimi-cmls-22. Add in your repo a general README file with a brief description of the project. Identify the repo as specified in the guidelines.