

giant_steps...



THE BEST USE OF GIANTSTEPS TOOLS

#MTF BERLIN HACK CHALLENGE

Tool name:

RhythmCAT - A VST plugin for real-time concatenative synthesis of rhythm.
The VST will be provided and installed during the challenge.

Description:

RhythmCAT is a concatenative synthesis VST plugin specifically designed with the intention of assisting electronic music producers to build rhythm patterns. This is accomplished using two main elements, both selectable by the user: (1) a rhythmic loop that will act as the source or seed, and (2) a folder full of wave files that will act as the sound palette. New rhythm patterns are generated using units from this sound palette, which will be arranged in such a way that they reflect the pattern and timbre characteristics of the seed loop¹. For that, each sound in the sound palette is automatically segmented into smaller units, and features, such as loudness, spectral centroid, spectral flatness or MFCCs, are computed and assigned to these units. These features are then used by the software for selecting the units from the sound palette which will be used for the reconstruction of a new loop. RhythmCAT can also be seen in that sense, as a radical rhythmic loops processor, in which the sounds used to generate the rhythms are up to the user's imagination. Some of the most interesting patterns can be achieved, for example, using non-musical, environmental sounds or speech²!

Demo video: <https://www.youtube.com/watch?v=Jl1bV4STAmw>

Operating environment:

VST plugin for OSX (Win version coming soon). Tested on Ableton Live, Reaper and Max/MSP, but should run on any DAW.

¹ In case you would need some Break Beats to warm-up, here is a great free collection from Moldover:
<http://www.joshuacasper.com/blog-post/100-break-beats/>

² Freesound is a massive free online repository for finding any type of sounds: <https://www.freesound.org/>