Feedforward

ALEX MCLEAN, Deutsches Museum, Germany and Then Try This, United Kingdom

1 PROGRAM NOTES

This is an improvised, from-scratch live coding performance. The NIME interface which this performance showcases is the new Feedfoward editor for the TidalCycles live coding environment. Feedforward is written in Haskell using the ncurses library for terminal-based user interfaces. It runs on low-powered hardware including the Raspberry Pi Zero, with formative testing of prototypes conducted with several groups of children between the ages of 8 and 14.

Feedforward has a number of features designed to support improvised, multi-pattern live coding. Individual Tidal patterns are addressable with hotkeys for fast mute and unmuting. Each pattern has a stereo VU meter, to aid the quick matching of sound to pattern within a mix.

In addition, TidalCycles has been extended to store context with each event, so that source code positions in its polyrhythmic sequence mini-notation are tracked. This allows steps to be highlighted in the source code whenever they are active. This works even when Tidal combinators have been applied to manipulate the timeline. Formal evaluation has yet to take place, but this feature appears to support learning of how pattern manipulations work in Tidal.

Feedforward and TidalCycles is free/open source software under a GPL licence version 3.0.

2 MEDIA LINKS

- A short demonstration video: https://vimeo.com/388656525

Licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). Copyright remains with the author(s).

Music Proceedings of the International Conference on New Interfaces for Musical Expression
NIME'20, July 21-25, 2020, Birmingham, United Kingdom