Passive to Active Interactions

https://passivetoactiveinteractions02.netlify.app/

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Inspired by Malinowski's MIDI Animation Machine this web-based installation presents the user with visualisations based on the parameters of the composition. The extension to their work is that the visualisations are 3D animations, with each of the two stages having a different mode of user interaction and experience.

The purpose of the installation is to give an opportunity to the user to experience the same piece of music with different animation and modes of interaction. In this installation the user will experience a shift from a hands-free interaction that is coupled to their head movement, and allows a sense of control, to the second stage where the user has a high degree of control to navigate and explore the emerging musical landscape.

The two stages intend to create something after the musical note has played and passed into silence. In the first stage the notes animate when played and then float past the users view, melding into each other to form randomised patterns. In the second stage the notes contain a mesh and form structures integrated together.

The installation UI is kept to a minimum and it is intended that the user will return to view the visualisation from different perspectives.
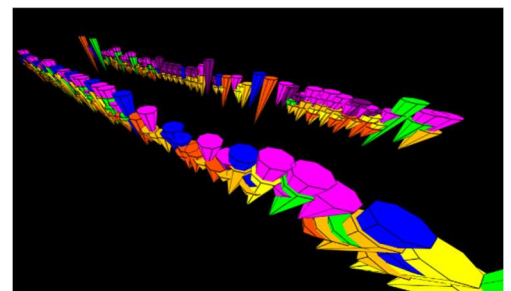
Interaction Modes

Stage 1 - Passive

The first mode is referred to as "Passive" and here the perspective of the visualisation is coupled to the user's head position via a webcam and face tracking algorithm. Initially the score will move silently and quickly pass the user, this is intended to initially confuse the user before the visualisation shortly re-appears and begins to become animated in sync with the music. The user will initially observe the notes in the middle of their view. As the notes are played, they will become animated and once a note has finished it will drift past their point of view
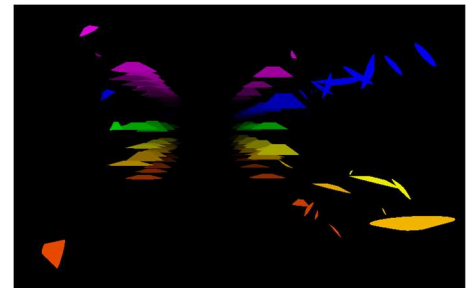
Figure 1 - Passive Interaction of Stage 1

Stage 2 - Active

In this stage the user will initially see the music begin to form in the distance before forming coloured shapes in sync with the music. The user can now control the view of the 3D scene via a mouse with control over Pan, Zoom and Rotation. Where, in Stage one the notes passed by in randomised orientations here the visualisation is created in a fashion to form combined structures of notes and chord patterns.

Figure 2 - Active Interaction of Stage 2