

The Musical Nexus

Urban design and place-making share a close link via the opportunities they create for people to interact with one another and the environment. Place-making has been proven to be a very useful method of channelising the pedestrian flows, reducing pedestrian congestion whilst attracting more people towards the urban built environment. It ensures that people are magnetically drawn towards a space.

(link to place making)

The recent development and distribution of interactive pervasive computing systems, especially those incorporating digital public displays, facilitate a variety of new interactive scenarios in shared public spaces where people gather and spend time to enjoy a social experience. Integrating novel interaction mechanisms related to the sharing and listening of music with digital displays has a good potential of using current technologies to enhance physical and social spaces in other terms for Placemaking activities.

The Concept

A vision-based, interactive musical experience which allows anyone, even untrained musicians, to conduct music. The goal is to allow the user to dynamically influence how music is played back, much like what a real conductor or DJ would do. The tempo and volume of the music playback are controlled by the user's movements. An additional functionality is that the user can control the intensity and the pitch of the sound by changing the speed of his hand or finger movements. The system could project colourful patterns and lights that respond to the user, making the interaction truly multimedia

It is believed that even a simple musical listening experience carries within it the presence of human action and human agency, and can facilitate feelings of empathy and social bonding.

Our research (refer appendix : Social music experience) highlights that shared music-making is a sophisticated example of the potential of music to express emotion and stimulate empathetic understanding between the community. It suggests that

Potential execution methods

1. **Interactive Orchestra** with multiple conductors having different set of instruments under their control through hand gestures. The variables include start n stop, speed, pitch, volume. Idea is also to display hand movements in a pre-orchestrated manner with a pre-recorded performance piece which abides by the rules of western classical music. The interaction element with multiple players could be executed by providing a sense of control over the music to each player intelligently, so that it still sounds pleasing to the other pedestrians passing by.
2. **Interactive Dj** playing electronic music : This has similar potential as above with different fun beats, visualisations and lights, It doesn't have a set number of instruments that we include. Works similar to musical pieces composed on a Launchpad. Its cool with less rules of engagement, appealing for younger generations in modern cities.