Haptic Music: Non-Musicians Collaboratively Creating Music

Maribeth Gandy, Andrew Quay

Interactive Media Technology Center Georgia Institute of Technology 250 14th Street NW, Suite M-14 Atlanta, Georgia, 30332, USA +1404 894 3638 {maribeth, andy}@oip.gatech.edu

ABSTRACT

The Haptic Music system allows up to three people to collaboratively create music in a jazz style. The users can have varying musical backgrounds, and even a novice can use his/her creativity to create a novel composition. The system consists of three stations: solo, rhythm, and accompaniment. The solo station allows a user to play individual notes and longer embellishments using the haptic lens interface device. At the rhythm station the user can add new beats to the composition using a midi controller. And the accompanist controls instrument levels, tempo, and the band via four proximity sensors.

Keywords

Interactive music, collaboration, musical interface, performance

ACKNOWLEDGMENTS

Special thanks to everyone at IMTC for their input, to Todor Fay for his DirectMusic guidance, and to James Oliverio for the use of his musical expertise.

REFERENCES

- 1. Machover, T. The Brain Opera and Active Music. Ars Electronica Festival ,Available as http://brainop.media.mit.edu/Archive/ars-Electronica.html. 1996
- 2. Machover, T. Meteorite Museum. Available as http://www.media.mit.edu/hyperins/meteor/. 1998
- 3. Marrin, T. Toward an Understanding of Musical Gesture: Mapping Expressive Intention with the Digital Baton. S.M. Thesis for MIT Media Laboratory, Cambridge MA, 1996.
- 4. Sinclair, M. The Haptic Lens. SIGGRAPH '97 Visual Proceedings, November 1997. 179.
- 5. Yackley , D. DirectMusic: Creating New Musical Possibilities. Microsoft Corporation. Available as http://www.microsoft.com/directx/overview/dmusic/dmcreate.asp, Redmond WA, September 1998.