21M.370 Digital Instrument Design
Reading assignment - Due March 1 at 11:30am

Wessel, David, and Matthew Wright. 2002. “Problems and Prospects for Intimate Musical Control of Computers.” Computer Music Journal 26 (3): 11–22.

Wessel D., Wright M. (2017) 2001: Problems and Prospects for Intimate Musical Control of Computers. In Jensenius A., Lyons M. (eds) A NIME Reader. Current Research in Systematic Musicology, vol 3. Springer, Cham.

This semester we will read several papers from the New Interfaces for Musical Expression conference (NIME). The papers we are going to read were all collected in a book, The NIME reader, in 2017. This book includes the original papers, as well as a postscript by the paper's authors and also by an external reviewer.

The paper for this week was initially introduced at NIME (and is included in the NIME reader), but then flushed out for a full-length journal publication in the Computer Music Journal. We will be reading the journal version of this paper, but it is also interesting to take a look at the NIME reader verson for the postscripts - both versions are included, but make sure you read the Computer Music Journal version for the main paper.

Also, the full paper in the computer music journal is kind of like several papers in one. We are going to read the first section of the paper (which

coincidentally also ends at the same point as the NIME paper.), from pages 11-17 and ending before the section labelled "techology" on page 17.

After reading the article, be sure to be able to discuss:

1. Their conceptual framework for NIME research and development. This isn't exactly novel in this article, but does ground their discussion.
2. The gesture-to-acoustic-event paradigm
3. Low Entry Fee with No Ceiling on Virtuosity
4. Latency requirements
5. The difference between an event-based and a signal-based control gesture
6. The four musical features desired for all instruments
7. The metaphors for musical control, both as a general concept and the specific examples presented in the paper.

Prepare a 1-page reading response, which focuses on aspects of the paper that specifically interest you, and describing how you imagine your work might address the issues brought up in the paper.

Supplementary material:
A video of the David Wessel demoing and performing with his Slabs instrument:
https://youtu.be/q_mtCZqN0Ms

A microsoft tech video talking about the effects of latency:
https://youtu.be/vOvQCPLkPt4