NIME Performances

Voice and Infrared Sensor Shirt

Tomomi Adachi

This project aims to connect sound processing techniques with physical gesture accompanied by vocal utterance. I am interested in the physical movement of vocal performers, in the use of gesture in everyday conversation and, as an extreme example, in sign language. Almost all vocal performers use conspicuous hand movements emphasizing the character of their music. I work with electronics for real-time voice processing, because I believe that the interaction between subjectivity and objectivity is an important aspect of art. The sound of the human voice is rather subjective and sound-processing acts to objectify the raw voice. In this performance the audience can trace the process of objectification. It integrates these two themes: reconstructing the relationship between utterance and gesture, and clarifying the musical process.

The shirt I use in this performance is equipped with ten infrared distance sensors, as well as four buttons on a band in my left hand. This way the space in front of the performer becomes a three-dimensional sensing area connected to a Max/MSP patch running on a laptop computer through a Voltage-to-MIDI converter. The patch modulates the vocal input in real-time. The sensor system and its wiring are visible to the audience. Very simple processing techniques are used such as delay, sample playback, and pitch-shifting. Complex effects are generated through compound gestures. This allows the audience to visually perceive the entire process like with traditional instruments. All sounds come directly from the voice. No prerecorded samples are used except for a cluster of sine waves in the final part of the piece expressing a counterpoint between the voice and the movement. This is a roughly structured improvisation. The ultimate goal is to create a humorous and exciting musical performance with contemporary technology.

http://www.adachitomomi.com/

Solo Performance for Indeterminate 'Dirty Electronics', 'Flickertron' and 'Pseudophone+'

John Richards (aka kREEPA)

A ten-minute foray into the irrational and indeterminate world of "*Dirty Electronics*". The electronic nebulous of the "*Kreepback*" instrument - a modular assemblage of digital, analog, and acoustic sound sources - is left to run riot, generating a dissonant sound world of hisses, squelches and pulses. The performer's control of the system is carried out through the very essence of the instrument: electricity. Hand-driven dynamos "feed" the tin, copper-wired, binary organism. The performance will also feature interfaces specially constructed for NIME 2006: the "*Flickertron*", a strobe light driven photocell instrument, and the *Pseudophone*+ where crushed cans and tins are brought to life musically through the use of natural resonance and conductivity.

http://www.kreepa.com/

Pieces for Plants #7

Miya Masaoka

Pieces for Plants is an interactive performance for houseplants, electrodes and computer, and performer. The electrodes and computer provide a sonic indicator of the plant's electrical activity and its physiological response to its surroundings in real-time.

In this piece, highly sensitive electrodes connect the leaves of a philodendron to a laptop computer. The electrodes give a "voice" to the plant, providing a sonic indicator of the plant's electrical activity and its physiological response to its surroundings. When the performer approaches the plant, one can hear the plant's response to her presence; when her hands are moved around the plant at varying speeds, the plant's responses are audible. The responses are extremely varied, and are sonified employing an array of parameters including partials selection, granular synthesis, and density. With this "sonification" of data, the performer can excite the plant and shape the performance. Audience members are encouraged to consider the possibility and potential of a plant that has a kind of awareness, that can communicate, taking on qualities of consciousness. Previous versions have been performed at the Lincoln Center Out of Doors Festival's Homemade Instrument Day and the Electronic Music Foundation's Ear to the Earth Festival in 2005.

http://www.miyamasaoka.com/