Stanford Laptop Orchestra

presents

Twilight Concert 2008

(a special outdoor evening concert at the CCRMA Courtyard)

Ensemble

Adnan Marquez-Borbon | Baek San Chang | Brett Ascarelli | Chris Warren | Chryssie Nanou | David Bao | Diana Siwiak | Ethan Hartman | Ge Wang | Gina Gu | Hayden Bursk | Jason Riggs | Jeff Cooper | Jieun Oh | Juan Cristobal Cerrillo | Juhan Nam Kayla Cornale | Kyle Spratt | Lawrence Fyfe | Luke Dahl | Marisol Jimenez Becerra | Max Citron | Michael Berger | Nick Bryan Patricia Martinez | Reed Anderson | Rob Hamilton | Steinunn Arnardottir | Turner Kirk | Vasiliy Sharikov-Bass

Director: Ge Wang

The Stanford Laptop Orchestra (SLOrk) is a large-scale, computer-mediated ensemble that explores cutting-edge technology in combination with conventional musical contexts - while radically transforming both. Founded in 2008 by director Ge Wang and students, faculty, and staff at Stanford University's Center for Computer Research in Music and Acoustics (CCRMA), this unique ensemble comprises more than 20 laptops, human performers, controllers, and custom multi-channel speaker arrays designed to provide each computer meta-instrument with its own identity and presence. The orchestra fuses a powerful sea of sound with the immediacy of human music-making, capturing the irreplaceable energy of a live ensemble performance and its sonic intimacy and grandeur. It leverages the computer's precision, possibilities for new sounds, and potential for fantastical automation to provide a boundary-less sonic canvas on which to experiment with, create, and perform music.

Offstage, the ensemble serves as a one-of-a-kind learning environment that explores music, computer science, composition, and live performance in a naturally interdisciplinary way. SLOrk uses the ChucK audio programming language as its primary software platform for sound synthesis/analysis, instrument design, performance, and education.

http://slork.stanford.edu/

Program

A breeze brings...
Scott Smallwood

This "prelude" came about as a result of several mornings of hacking in ChucK (a computer music programming language developed by Ge Wang). As I listened to the wind chimes outside my door, I began to realize that they were influencing the intuitive process of my experimentations. Before long I had created some algorithmic instruments that sounded rather nice together. This piece grows slowly out of the acoustic soundscape of the space, and then slowly subsides back into it, like a very slow breeze.

Take it for Granite
Perry R. Cook

This sonic landscape was mined from recordings of stone sculptor Jonathan Shor's working of a large piece of granite. I recorded him drilling, placing shims, tapping the shims, and the wonderful sound of millions of years of energy being released as the stones split. The human players manipulate these sounds via a ChucK program that allows them to change properties of the sounds. Eventually, a rhythmic pattern emerges (the striking) wherein the individual players control both texture and synchronization.

TajProj One: Real Wide Audio and Taj Mahetheno Enterprises Presents...
Turner Kirk

TajProj One originated as a solo performance peice in MUSIC 220b. Now it is a full fledged networked performance including a Server and multiple Clients. It implements a proprietary (thanks to RealWA and TajME), cross platform interface taking the shape of a simple "paint-like" program likening itself to one you might find built in to a computer's applications directory. There are four different "shapes" that can be used, each bringing it's own sonic identity to the canvas. The one true Taj acts as the server, loosely controlling the whole thing by adding the shapes which are sent through a series of tubes to each performer. The performers (Taj's minions) can then move the shapes around their own separate canvas affecting the shapes' sonic characteristics. They can also add and remove the shapes they've been given but ultimately the Taj can take away everything. The beauty of this performance is it can take the form of a consonant and beat driven techno-ish extravaganza, or if the server fails and the performers don't blend it can become a beautifully out of tune catastrophe. Of course in the end it levies off of the unique CRASHABILITY of the chuck programming language!! Death => ChucK. Abort current thread much?

... are you there? ... can you hear us? ... gustav?
Juan Cristobal Cerrillo

an improvisatory invocation of the Viennese composer.

Gods of the Dead
Ethan Hartman

Gods of the Dead is a piece about the many figures which are have been believed to guide us between life and death, as well as the uncertainty of knowledge and belief. In the first two sections, four human chanters read texts from Homer, Virgil, the Hebrew Bible, Flaubert and Allen Ginsberg, while laptop musicians sample and transform their words. The last section simply invokes by name those who watch over and guide the dead.

While it at first may seem morbid, the piece is intended as a meditation on belief and transition throughout and beyond our current existence.

Crystalis
Ge Wang

Originally created for the Ear to the Earth Festival in NYC, this piece is a sonic rumination of crystal caves in the clouds, where the only sounds are those of the wind and the resonances of the crystals. It uses two simple instruments called the crystalis and wind-o-lin. These instruments make use of the laptop keyboard (which controls pitch and resonance) and the trackpad (which the players "bow" in various patterns to generate sound).

I miss my uncle ChucK
Steinunn Arnardottir

We all miss our uncles, don't we?

Morse Code
Hayden Bursk

Morse Code attempts to exploit nostalgic feelings in both the audience and the performers. Using the morse code sounds of yesteryear, performers must relay messages to each other in a giant game of computer music telephone.? Rhthmic and melodic patterns evolve as messages passed around become subject to human error and performer improvisation.

MAUI
Diana Siwiak

MAUI is an attempt at developing a ChucK code using graphical user interface. While crafting a variable multi-speaker instrument, ideas for a composition arose. This piece can be played with one laptop on stereo speakers (2 channels) all the way up to 20 stations using 6-channel hemispherical speaker arrays (120 channels). It is a good starting point to illustrate the many dimensions of particular sound sources. Look forward to future iterations of this simple instrument!

nous sommes tous Fernando...
Robert Hamilton

Deep underground, located beneath the CCRMA courtyard lies a super-secret musical warfare laboratory funded by the United States Military, developed in conjunction with Guitar Center and Sweetwater.com. While details about the project are scarce to none, local legends usually mention high-powerd futuristic plasma weapons... and lizards.

nous sommes tous Fernando... by Robert Hamilton is an improvisatory work written for the Stanford Laptop Orchestra (SLOrk) using q3osc and ChucK. Performers control avatars in a virtual environment, firing sound-projectiles which bounce or home-in on individual performers, creating sound events with every bounce/collision with a surface of the environment. Virtual sound sources are represented by hemispherical structures in the virtual environment, with hemispherical speakers in the real-world laid out in a similar configuration. Spatialization is correlated between virtual and real-environments, with various aspects of each sound-event (frequency, timbre, duration) mapped to various axis and relationships in the virtual environment.

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https://cm-wiki.stanford.edu/wiki/Q3osc
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