

Into the Veld (2018)

Tucker Leavitt and Kimberly Juarez-Rico

"The lions look real, don't they? I don't suppose there's any way that they could become real?" A distributed percussion set for two soloists and ensemble. Two children survey the world they have made.

Crystalis (2006)

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).

About SLOrk



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 Ge Wang and students, faculty, and staff at Stanford University's Center for Computer Research in Music and Acoustics (CCRMA), SLOrk consists of 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. At the same time, the orchestra makes use of the computer's precision, possibilities for new sounds and interactions to experiment with instrument design and musical expression.

Offstage, the ensemble serves as a unique classroom that explores music, computer science, interaction design, composition, and live performance in a naturally interdisciplinary way. (It's also a cross-listed course in Music and Computer Science). Tonight's instruments are crafted using the following tools: ChuckK and Max/MSP/Jitter, along with Java, OpenSoundControl, bash, C/C++, FAUST, FauxK, OpenGL, and Python.

SLOrk will return in 2019.

<http://slork.stanford.edu/>



Stanford Laptop Orchestra (SLOrk)

presents

SLOrk in the Bing 2018

June 9, 2018, Saturday 7:30pm
Bing Concert Hall, Stanford University



Stanford Laptop Orchestra (SLOrk)

Ensemble

Doga Çavdir, Charles Foster, Elena Georgieva, Mark Hertensteiner,
Kunwoo Kim, Juan Sierra, Ian Avery Bick, Kimberly Juarez-Rico,
Tucker Leavitt, Kangrui Xue, Rodrigo F. Cádiz

Director

Ge Wang

Co-directors

Matt Wright, Christopher Jette, Trijeet Mukhopadhyay

Marguerite's Bowls (2018)

Mark Hertensteiner

Marguerite: the horse—not the bus. Her bowl was full of feed...back. Each player is a self-contained feedback loop, and uses the *HemiBowl* instrument, modeled from a Tibetan singing bowl, to pluck or sing energy into the system. By changing the feedback gain and delay length, the players ride the level and pitch up and down, teetering on the edge of falling off or losing control. Keep a firm grip on the reins!

Non-specific Gamelan Taiko Fusion (2005)

Perry R. Cook and Ge Wang

This piece is an experiment in human controlled, but machine synchronized percussion ensemble performance. Various percussive sounds are temporally positioned by SLOrk members, and the piece gradually transitions from tuned bell timbres to drums as the texture and density grows.

rU10 (2018)

Ian Avery Bick, Kunwoo Kim, Matthew Wright

The individual and the collective exist in a dynamic equilibrium—adversarial yet interdependent. This piece investigates how historical social cycles of revolution and realization are warped by new factors: the internet, AI, and our own evolution. Vocal samples provided by Paris Mancini (parismancini.com).

I know your nerves are copper with rubber insulation;
I know your voice is programmed by someone,
but I don't care. We're all programmed—
naturally or artificially

— Don Clermont, *Untitled*

Harmony In the Wind (2018)

Doga Cavar, Kangrui Xue, Juan Sierra

This work tries to reconcile the world of computer music with traditional orchestral ensembles and tonal music. The ensemble is composed by four *blowTops*, four *tapTops*, a *bassTop*, and a *percTop*. Together they navigate a peaceful and calm harmony while the soloist plays with a melodic *blowTop* to bring together a beautiful and serene environment, like harmony in the wind.

Orbitae (for *arcontinuo* and laptop orchestra, 2018)

Rodrigo F. Cádiz

Orbitae is a word in latin that means orbits. This is a piece in a “concerto” style, with the *arcontinuo* playing the role of a soloist while the laptop orchestra counterpoints the material the soloist proposes and transforms. The soloist explores different sound worlds that he then passes on to the orchestra. At times, the focus is only on one sound while, at other times, the control is exerted over groups of sounds. As time progresses, each performer of the orchestra explores different zones of a two dimensional sound orbit, in a sinusoidal manner. This piece explores the spaces between orbital/sinusoidal motion, score-following/improvisation, and soloist/ensemble.

The composition of Orbitae was made possible thanks to the support of Programa IBERMÚSICAS and Consejo Nacional de la Cultura y las Artes, Government of Chile.



Beatboxing Machine (2018)

Elena Georgieva

Human vocal percussion sounds are reimaged as a laptop orchestra drum machine. Performed by 12 humans, 12 machines, and 12 subwoofers, this piece is beatboxing like you've never quite heard before! Elena is a vocal percussionist; she *is* the source material for this this work. *Enjoy!*

River Crab (2018)

Charles Foster

River Crab is a piece for laptop orchestra and *MadMask*, an embodied, head-and-torso-mounted electronic instrument. “In spoken Chinese, river crab sounds very much like harmony, which in China's cyberspace has become a synonym for censorship.” [1] This idea of “being harmonized”—whether you want to or not—is at the heart of the piece's musical and performative politics. Each station is a participant in the evolution of a tonal landscape, but at the same time, each station is restricted to conform to the sound world of the orchestra at large. Across five movements, the conductor further probes the tension between these two realities, as their role in the orchestra shifts from the autocratic to the collaborative and back again. It begs the question: what exactly does it mean to self-express under the intense pressure of harmony?

[1] <https://mobile.nytimes.com/2009/03/12/world/asia/12beast.html>

Allegory (2018)

Matt Wright

Allegory tells its own meta-story: diverse SLOrkers come together starting with diverse ideas, identities, skills, and materials. At first we each make our own statements, but thrown together by forces beyond our control we must evolve to respond and react to each other. An *ensemble feedback* network literally passes the performers' sounds into and through one another's instruments. Can we form a group mind that can create something in the moment greater than the sum of its parts?

- I. We begin as individuals, each with something special. Dump them all out, then take turns
- II. Duos and trios transform and elaborate in turn
- III. Small circuits complete, creating feedback loops
- IV. Shifting subgroups cross-pollinate promiscuously
- V. One grand ring unites us all

The Making Of (2018)

Trijeet Mukhopadhyay

What happens behind the scenes of the Stanford Laptop Orchestra? How does any of this come together, and what is that process like? Is everything you are hearing tonight a product of the last five weeks (hint: pretty much)—and did we have fun while doing it? (Uh, ask us afterwards.)

Composed using recordings of rehearsals over these past 10 weeks, *The Making Of* attempts to shed light on some of these questions.