Ben Tripp is a lifelong musician, currently studying Symbolic Systems AI with a coterminal master's in Computer Science. Ben loves to mess around with all sorts of different ways to make sounds, but is primarily a singer.

Ivan Villa-Renteria is a coterminal master's student in Computer Science. He has played Jarocho harp in Mariachi ensembles, and picked up electric guitar during the pandemic. He is endlessly mesmerized and fascinated by Synthwave, Vaporwave, Japanese City Pop, and anything else that the Youtube algorithm fed him during his college years. His research involves creating and training controllable generative AI models for music performance and music production.

Ge Wang is an Associate Professor at Stanford University's CCRMA and a Senior Fellow at Stanford Human-Centered AI Institute. He researches the artful design of tools, toys, games and interactive AI systems. Ge is the architect of the ChucK music programming language and directs the Stanford Laptop Orchestra (SLOrk) and the new Stanford VR Orchestra (sVoRk). He is the Co-founder of Smule and the designer of the Ocarina and Magic Piano apps for mobile phones. A 2016 Guggenheim Fellow, Ge is the author of *Artful Design: Technology in Search of the Sublime*, a photo comic book about how we shape technology—and how technology shapes us.

Dr. Matthew Wright is a media systems designer, improvising composer/musician, computer music researcher, father of an energetic 7-year-old, alopecia survivor, and CCRMA's Executive Director. His research has included real-time mapping of musical gestures to sound synthesis, helping develop and promote the Sound Description Interchange Format (SDIF) and Open Sound Control (OSC) standards, computer modeling of the perception of musical rhythm, and musical creation with technology in a live performance context.

Tonight's instruments are created using the ChucK music programming language, Open Sound Control, Max/MSP, RayTone, Fluidsynth, python, bash, Discord, Google Sheets.

The Stanford Laptop Orchestra (SLOrk) is a large-scale, computer-mediated ensemble that explores cutting-edge technology in combination with conventional musical contexts—while transforming both. Founded in 2008 by Ge Wang with 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 performance ensemble and its sonic intimacy. At the same time, the orchestra makes use of the computer's capabilities for new sounds and interactions—to imagine and realize new instruments for musical expression. Offstage, SLOrk serves as a unique classroom that explores music, computer science, artful design, composition, and live performance in a naturally interdisciplinary way.

SLOrk will return.

Stanford Laptop Orchestra (SLOrk)

June 8, 2024, Saturday 7:30pm
Bing Concert Hall, Stanford University

Ensemble

Ben Hoang | Ben Tripp | Celeste Betancur | Daniel Mottesi | Eito Murakami
Ivan Villa-Renteria | Kelly Cochran | Kiran Bhat | Leo Jacoby | Matan Abrams
Pedro González | Peter Li | Samantha Liu

Co-directors

Matt Wright and Celeste Betancur

Director

Ge Wang

Livestream & Cameras

Kunwoo Kim, Andrew Aday Zhu, Madalyn Merkey, Sami Wurm, Becca Wroblewski

Special thanks to the fantastic Bing crew

CCRMA MUSIC AT STANFORD STANFORD UNIVERSITY

MEHOME (2024)

Ben Tripp

hive mind emergent sentience feels homesick for nowhere :/

Star Life (2024)

Matan Abrams, Danny Mottesi, Leo Jacoby

Through examining the death and afterglow of a star, we examine how chaos and violence can give way to growth and rebirth.

Dysfunctional (2024)

Pedro González

In a world increasingly dominated by artificial optimization, a choir of glitches speaks to the beauty of imperfection.

An Abstract Cup of Tea (2024)

Kelly Cochran

An attempt to bring synesthesia to life; a nod to finding comfort in small rituals; and a definitely grown-up, not-at-all-imaginary tea party.

SLORK'S BIZARRE ADVENTURE: I Scrolled Through My Phone To Look At Memes And Now They Control My Life! (2024)

Ivan Villa-Renteria & Ben Hoang

Memes have profoundly impacted our lives—they are, as Monsoon said in Metal Gear Rising: Revengeance, "The DNA of the soul. They shape our will. They are the culture. They are everything we pass on." But have we given the memes too much power over our lives?

Proof of Identity (2024)

Eito Murakami

"Ever since I was a child, I dreamed of becoming an artist. Is it possible to lose your identity without losing yourself?"

A to JFK (2024)

Peter Li, Kiran Bhat, Samantha Liu

The world inside the mind of a kid on his last subway ride in a city that has become his second home. As the train approaches the airport, he nervously imagines his future as he reminisces memories with family and friends. When will he hear the sounds of the train again?

Matan Abrams is a coterminal master's student in Computer Science. He started his musical journey with the piano and later picked up the guitar as well. He loves to compose and improvise and has developed a love for computer music through this class - Stanford Laptop Orchestra. He also loves to play frisbee, soccer, and most other sports.

Kiran Bhat is a senior studying Computer Science. He has been playing piano and writing music for 16 years. He believes that SLOrk has helped him combine his passions for music composition and coding to make some cool stuff. Find out if he is right in A to JFK!

Kelly Cochran thinks program bios should be in first person. I'm a Computer Science Ph.D. student studying computational biology, and SLOrk is my home at Stanford. I am who I am thanks to years of conducting and playing various brass instruments through high school and with the Duke Marching Band and Wind Symphony.

Pedro González is a Spanish violinist, composer, and researcher specialized in multidisciplinary and intermedia art projects. His compositions have been performed at various festivals around Europe, including the Internationales Musikfest Hamburg, International Computer Music Conference, Sound & Music Computing Conference, Centre National de Création Musicale (GRAME), Musica Festival in Strasbourg, or Klangwerksttat, Berlin. In March 2021, Pedro was appointed Professor for Contemporary Music, Multimedia Composition, and Non Idiomatic Improvisation at ESMUC in Barcelona. He also gives seminars on live electronics and multimedia at the Musikhochschule Lübeck and works as a freelance composer and violinist in Spain and Northern Germany.

Celeste Betancur Gutierrez is obsessed with dance, magic and music.

Ben Hoang is a 3rd year undergraduate student studying computer science and music. He came from a classical piano background and just recently got involved in computer music through SLOrk. In his free time, he loves to ride his motorcycle, skateboard, and play games with friends.

Leo Jacoby is a junior studying Symbolic Systems. He plays bass with a campus band called In Town. Leo loves electronic music and is interested in exploring how it lends itself to performance through this ensemble.

Peter Li is a junior studying Computer Science and Music. He came from a classical piano background and later grew to love improv and composition. He composes for multiple theatrical organizations on campus, performs with the SImps as a musical improvisor, and raps under the name PTZ. He is super excited to begin his computer music journey at SLOrk! Slay, slatt, skrrrt.

Samantha Liu is a first year master's student in Computer Science. Her current research interest is in AI for education. Her instruments of choice are the ukulele and the whistle, though she is always excited about new instruments too.

Danny Mottesi is an undergraduate junior studying Symbolic Systems and Music. He was brought up playing piano and guitar and, upon learning to code at Stanford, began to delve into the world of computer music.

Eito Murakami is a 2nd year master's student at CCRMA who designs digital interfaces and instruments that promote a playful workflow for transforming creative ideas into artistic content. His research involves developing audio playback systems in virtual reality to process dynamic spatial reverb and multiplayer interactions.