

ICLC 2027 - Proposal for Live Performances

Live Performances (including audio, visual, and A/V or multimedia) will largely be sorted into one of two formats: a concert format, with seated audience; and an Algorave format, unseated and intended for dancing. As we explore venues and dates, and according to patterns that we see emerge from the submissions received, we intend to program several different subcategories of the concert format.

1. General Information

- **Performance Title:** Mother, Demos of All,
- **Main Contact:** Tomoya Matsuura(me@matsuuraatomoya.com)
- **Additional Performers:**
- **Performance Type:** Concert

2. Performance description

A live coding performance exploring the concept of “demonstration.” The performance is conducted using mimium^{*1}, a programming language designed for real-time signal processing.

The performer reads a text explaining the meaning of the word “demonstration,” starting with Douglas Engelbart’ s 1968 demonstration of the NLS computer system^{*2}, while simultaneously controlling the microphone audio in real time and modulating it to intentionally induce audio feedback. The performer does not simply write code and speak; they also performs by controlling the spatial position of their own voice and by using megaphone to spatially control the occurrence of feedback.

Engelbart’ s demo was later described by journalist Steven Levy as “the mother of all demos” in 1990s; however, this phrase— “the mother of all XX” —originated from an English translation of Saddam Hussein’ s statement at the start of the Gulf War— “The mother of all battles has started” —which became a meme through American news coverage. Demonstrations today have become polarized into either direct political action or pure appeals for linear technological progress.

Engelbart’ s research can be traced back to “As We May Think,”^{*3} an essay published by Vannevar Bush just before the end of World War II (more specifically, one month before the atomic bombs were dropped on Hiroshima and Nagasaki), which is considered the founding text of research on human intelligence

^{*1} <https://mimium.org>

^{*2} Doug Engelbart 1968 Demo, <https://www.doungengelbart.org/mousesite/1968Demo.html>

^{*3} Vannevar Bush. 1979. As we may think. SIGPC Note. 1, 4 (Spring 1979), 36 - 44.
<https://doi.org/10.1145/1113634.1113638>

augmentation. Bush felt that, with the end of the war in sight, humanity would face increasingly complex problems and therefore needed to become smarter. However, the demonstration presented by Engelbart ultimately obscured the “what” and “why” behind the technology, focusing purely on showcasing what it could do.

In this performance, the performer attempt to re-politicize the significance of “showing code” —long considered a virtue in live coding^{*4} —by reflecting on the history of how the term “demonstration” has been depoliticized.

In live coding, there is the issue that the audience does not necessarily understand the meaning of all the code. In the latter half of the performance, the performer demonstrates that the symbols (variable names) linked to sounds are arbitrary—for example, by mechanically replacing the function name “kick” with “bullet” while showing that the code continues to function unchanged. Subsequently, the performer rewrites the definition of the sound associated with “bullet” to produce a sound clearly unrelated to “bullet,” thereby demonstrating that even without understanding the meaning of all the code, a narrative can still be established through the correspondence between the code and the sound.

Technically, this performance actively utilizes real-time rewriting of low-level signal processing—a feat that would be difficult to achieve without the live coding functionality of *mimium* (of which the author is also a developer). Previously, the author has attempted performances involving similar audio feedback using languages such as *Chuck* and *Faust*^{*5}; however, with existing languages, issues such as audio dropouts and the reset of delay and reverb tails occurred when swapping signal processing instances. *mimium*’s live coding feature addresses these issues by performing differential analysis of the function call tree, allowing instances to be swapped while preserving their internal states as much as possible, thereby achieving a natural transition without audio dropouts.

Through these technical elements, this work presents a sound performance combining dialogue reading and audio signal processing that differs significantly from musical expression using existing MIDI or other note-based languages.

The performance is scheduled to last approximately 25 minutes (subject to some variation depending on the schedule).

3. Video and/or Audio Material

“Mothers, Demos of All,” Live Coding Performance with Programming Language *mimium* by Tomoya Matsuura (2026.03.22, at Tokyo University of the Arts, Art Space)

^{*4} ManifestoDraft - Toplap <https://toplap.org/wiki/ManifestoDraft>

^{*5} Wang, Ge, and Romain Michon. “FAUCK!! HYBRIDIZING THE FAUST AND CHUCK AUDIO PROGRAMMING LANGUAGES.” Sound and Music Computing Conference (SMC-16) (Hamburg, Germany), August 2016, 310 - 13. <https://hal.archives-ouvertes.fr/hal-03162895>. The author had previously performed with *fauck* in Algorave Tokyo August 2018.

<https://www.youtube.com/watch?v=svM26xFPyNo>

The reading in the past performance has done in Japanese but I will speak in English in this time.

4. Program Note

A reading/sound performance about “demonstrations” using the sound programming language mimium. A demonstration is an act of presenting something; it can signify direct political action, while at the same time it is sometimes used to showcase technological advancements. In this performance, while reflecting on the history of how technical demonstrations—as exemplified by Douglas Engelbart—have become depoliticized, the performer tries to connect this to the aesthetics of revealing code in live coding and attempt to repoliticize technical demonstrations. The performance is executed by intentionally inducing real-time audio feedback from the voice being read aloud, captured by a microphone, and controlling that feedback.

5. Artist(s) Biography

Matsuura Tomoya/松浦知也 is SoundMaker: who makes a sound, makes instruments to make a sound, and makes environments to make the instruments. He calls his own research area “Civil Engineering of Music” , which designs socio-technical infrastructure around sound and music critically through practices. He develops “mimium” a programming language for music(2019~), and does performances with “Exidiophone” , an electro-acoustic instrument that makes sound with only an audio-feedback.

Ph.D in Design. He is born in 1994 at Chigasaki, Kanagawa Prefecture. Graduated Department of Music in Tokyo University of the Arts and Graduate School of Design, Kyushu University.

<https://matsuuratomoya.com/en>

ICLC 2027 - Technical Requirements

Live Performances

1. General Information

1.1 What setting is the performance intended for?

Concert setting with seated audience will be preferred but moving/exploring audience are also okay (maybe some interesting intervention to audio feedback will happen).

Any lighting setting is okay if the characters on screen are clearly visible.

1.2 How many performers will be in the performance?

1

1.3 Are you open to being paired with another performer?

Basically no (I will show my text editor for code and dialogue texts, if the visual performer does not affect to the visibility of those texts that maybe okay)

1.4 Will your performance require technical support during the set?

No but maybe some discussion needed with sound operator if the compressor/limiter of main console significantly prevents system from inducing audio feedback

2. Materials Needed

VIDEO

2.1 What are your projection needs?

1 1920x1080 HDMI output

Basically I want to mirror my entire screen. If sub-screen/display is available, I will use for displaying dialogue text window.

AUDIO

2.2 How many input channels on the mixing console do you need?

2ch XLR

2.3 Do you require a microphone? If so, how many microphones does your performance need?

I use 2 channel microphone placed close to the table but they will be connected directly to my audio interface.

2.4 Do you require a monitor, either over headphones or otherwise?

want to discuss on the time of rehearsal, because I use controlled audio feedback from main speaker to microphones. The volume of monitor speaker will significantly affects to temporal quality of output.

2.5 Are you bringing your own audio interface?

Yes(I will use RME Babyface Pro)

OTHER

2.6 How much table/floor space will you need for your performance? How many chairs?

1 table for putting laptop, audio interface and megaphone

2.7 Do you need an internet connection during the performance?

No

2.8 Anything else you need?

1 boom microphone stand will be helpful.