Viola Leqi He
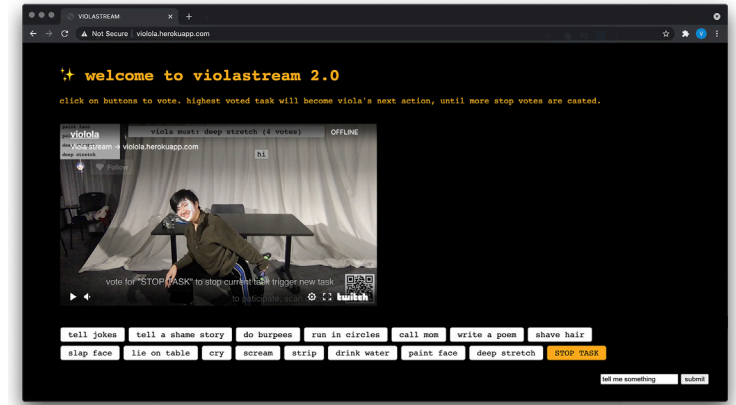
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**Interactive
Telecommunication Program,
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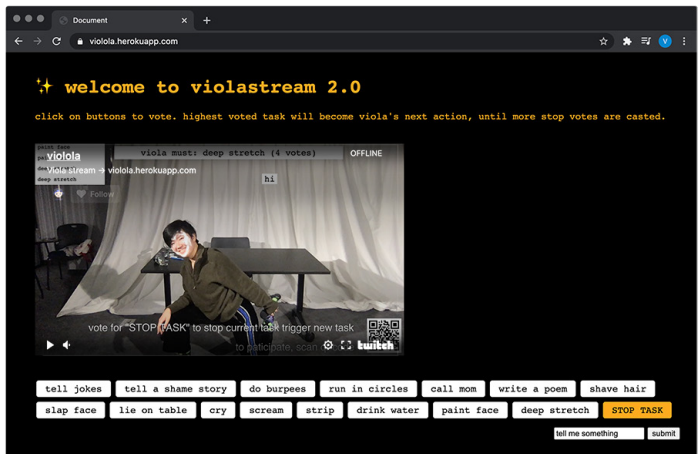New York University,
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**VIOLASTREAM is an online, interactive performance that utilizes web
technologies in order to explore the performer's body as it relates to
others. The core of this performance is a system I devised, handing control
to my audiences who collectively vote for my behaviors. At my isolated
performance space, a computer displays and reads the audiences' votes
and comments in real time, and asks me to carry out the highest voted
tasks. While the audiences act as commanders and spectators, Viola's
body performs the role of the object and machine, creating a cybernetic
relationship through webcam and livestream as medium.**

Description

In 2020, live streaming saw a global rise in popularity due to the COVID-19 pandemic. According to StreamElements and its analytics partner Arsenal.gg, global viewership has increased by 15% on YouTube Gaming, and 10% on Twitch, peaking at around 1.7 billion hours in November. Streaming is growing into a medium that's become rather ubiquitous in various forms of media consumption, with new possibilities opening up to artists, educators and media practitioners.

The core of VIOLASTREAM is a system where I hand control to my audiences who collectively vote for my behaviors online, live-broadcasted to the very people who cast these votes. Through a hand-coded HTML webpage (see Figure 1) that embeds the voting system, a comment input box, and a livestream where the votes are counted, comments are shown, and highest voted tasks are carried out by me, the performer, in real time, all the information sent through different devices at different locations connects into one networked interaction. The webpage is connected via socket.io, a JavaScript library that enables server-client communication, to a p5.js sketch, which displays as an overlay of the livestream on Open Broadcaster Software (OBS). With the implementation of p5.speech, a p5.js extension with text-to-speech functionality, individual inputs merge into one computational voice feeding me orders and information. All the audiences, in turn, become one spectating commander, while the performer's body act as the object and machine, creating a cybernetic relationship through livestream as a medium.
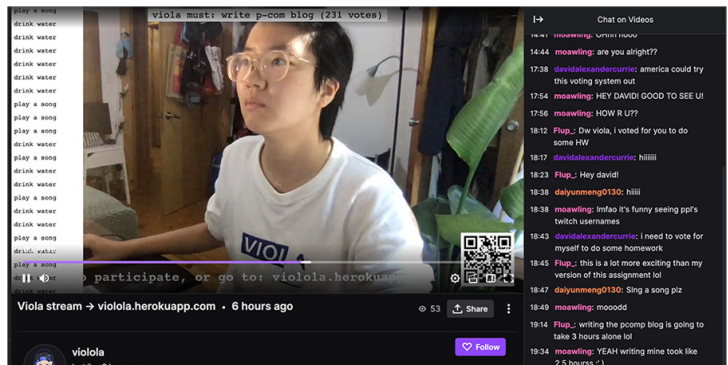
Fig. 1. The Webpage that houses VIOLASTREAM.

Inspired by the works of performance artists Tehching Hsieh and Marina Abramović, who often inspect their own bodies and identities in relations to others, I wonder about how participatory, time-based performances challenge personal agency in human-to-human communications, and how that would be changed, disrupted, or enhanced with the involvement of internet and computational machines. My interest was not exactly in pushing boundaries of performance art, but rather questioning those relationships in the current reality. In 2020, live interactive performances on digital media is no longer an unfamiliar act, as we see a rise of streamers, gamers and sex workers on different live-streaming platforms encouraging controlled interactivity as means to boost engagement and monetization. Internet personalities such as Twitch user Ludwig host continuous live-streaming for days and even weeks, exposing their daily lives while making certain choices available for the audiences (gifting, subscribing in exchange of longer streams, certain requests, as well as sometimes harmful fan-initiated interventions). However, as a performer that emphasis on their commonality as an everyday person, offering control of minute, mundane movements that are only slightly too intimate to perform for strangers online, my question for agency in this human-machine-human relationship is a confrontation to the mild hell of daily awkwardness.

VIOLASTREAM's two iterations were performed three times in different spaces. The initial version, performed on October 6, 2020, was created under the prompt of "self-reinvention", aiming to discussing what it means to give up agency in my day-to-day life. It was set up at my apartment, with tasks I could complete from my bedroom and kitchen. The audiences were able to vote on the webpage and converse in the Twitch chat of my stream, but I didn't address them during the performance. (see Figure 2)

Fig. 2. Screenshot of Livestream during first Performance.

On December 16 & 17, 2020, VIOLASTREAM 2.0 was performed twice for the online ITP Winter Show at NYU Tisch School of the Arts. Taking away the emphasis of a domestic environment, I created a "neutral" performance space to conduct more intimate tasks, while tweaking the voting system as well as creating a continuous interactive feedback loop with comment input and text-to-speech functionality. I intentionally included tasks that would make me uncomfortable, and the eventual performances, as a result, felt a lot more emotional and personal. This is a project that I plan to continue developing, through setting up in different spaces and interacting with different audiences, refining the system along the way. Proposal of the 3.0 version, if presented in the conference, would potentially involve a network of lights and cameras that can be selected and controlled by the audiences.

Entering this performance, I was aiming to explore the choreography of control as I, creator of the feedback system, invite the computer into my relationship with other humans, using live-streaming as medium. In her text "On Software, or the Persistence of Visual Knowledge", Wendy Hui Kyong Chun examined computation as an act of command, and therefore puts the programmer in a position of power with a pleasurable sensation of control, which is closely related to the gendered history of programming (Chun 2005). I felt strongly that the anxiety of lack of control in this performance was, at the same time, empowering and liberating. Just like women in early computing who worked as "human computers", as both the indicator and indicated, I, a human who occupies a female body, find my roles of programmer and performer to be complimentary and contradicting. While the machine delivers the commands from the spectators attempting to control me, it's also an embodiment of myself.

From time to time taken by the kindness of the audience, there was also a sense of collectiveness in individual acts of command. Performing during a global health crisis is to work through shared experiences of solitude, isolation, and, according to Yuk Hui, "a time of catastrophe" in which we should seek "a concrete solidarity" (Hui 2020). VIOLASTREAM amplifies the "interconnected nodes" in a "network society" in the accelerating digitization age, creating a networked system that magnifies each nodes in relations to the others as well as the center connection (Castells 1996), even if it's just within a temporary community of participants in this performance. With every comment communicated, every vote read and calculated (some responded and acted out), viewership, together with the participation of the "unbiased" machine that runs the algorithm, creates an ecosystem beyond a simple performer-audience relationship.

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