

on the corner of Lomita Dr. and Campus Dr.  
Stanford, CA 94305  
June 4-8, 10

The Frankenstein GRID: Stanford's Monster of Modern Science

**FRANKENSTEIN x ArtX [June 8<sup>th</sup>]**

**8 - 8:45 GRID + sound environment**

audio: "See you in a field" by Dr. Onn Brandman

**8:45 - 9:15 video programming: ArtX showcase**

Ramin Ahmari

Nibha Akireddy

Ian Avery Bick

Cenobio Hernandez

Cynthia Jia

Sandro Luna

Euan Yang

NB audio interludes: NEURAL ORDINANCE by Nolan Lem, 10:06.

*"neural ordinance* is comprised of sounds that are a result of my computer being trained to produce industrial noises. In this type of deep learning, recurrent neural nets literally teach the computer how to produce sounds that are representative of machines themselves. As such, this piece focuses on a large corpus of field-recorded sounds that include audio related to industrial drones, server farms, consumer electronics, HVAC noise, etc. After processing these recordings, the computer 'dreams up' sound based off of its own idea of what industrial noise is. If we can treat the computer as a superlative machine, the neural network seeks to reify a sonic representation of what the computer itself thinks it sounds like. In this way, it shows the computer trying to listen to itself.

In this instance of the piece, the noise emanating from the speakers on the CCRMA stage were included into some of the training sets used in the synthesis. As a result, the output sound is a mixture of both real-life analog noise and the computer's interpretation of the same. The sounds undulate, swell, and breathe to form an ecology of machine-interpreted awareness, one that suggests a strange convergence of the real and the digitally imagined, the sentient and the synthetic.

The title is taken from the term 'noise ordinance' which refers to the noise regulations that are typically enforced by city zoning codes. In this case, the neural network acts as a governing agency that imposes its own definition of what is constituted by 'noise'."

### **9:15 - 10 GRID + sound environment**

#### **bio**

ArtX is a student club recently borne of a group of students with the purpose of cultivating and sustaining a community for those interested in bridging their interests in both the arts and the sciences, creating art with tech, in an effort to bridge the 'techie-fuzzie divide' which currently defines Stanford's student culture.

ArtX, by name, is constructed with reference to the mathematical notion that the exponent is more powerful than the base. In this case, 'X' can be any variable, for example, virtual reality, sound, light, structural engineering, artificial intelligence, or bioluminescence, to name a few. Intersectionality is the core constituent of our student organization and is thus represented by our exponentiation and intercrossing with the 'X'.

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