

# Gray Cake

Portfolio

# Projects

«Herbarium», 2020

«The Piaget Phenomenon», 2020

«Vremyanka», 2020

«Nina», 2019

«Conductor», 2019

«Game over», 2019

«SNOUM», 2018

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## «Herbarium», 2020

Can we imagine plants that does not exist in nature? Is there any technology that may help us imagine such things?

The Herbarium is generative video art, answering this question. Neural network StyleGAN2 was trained on a huge data set of plant images from the archive of New York Botanical Garden, and video is representing the imagination process.

The audio track is a nightingale song processed by the neural network algorithm Magenta DDSP Timbre Transfer.



Video [https://www.youtube.com/watch?v=rmkLuPRxfjM&feature=emb\\_title](https://www.youtube.com/watch?v=rmkLuPRxfjM&feature=emb_title)

## «The Piaget Phenomenon», 2020

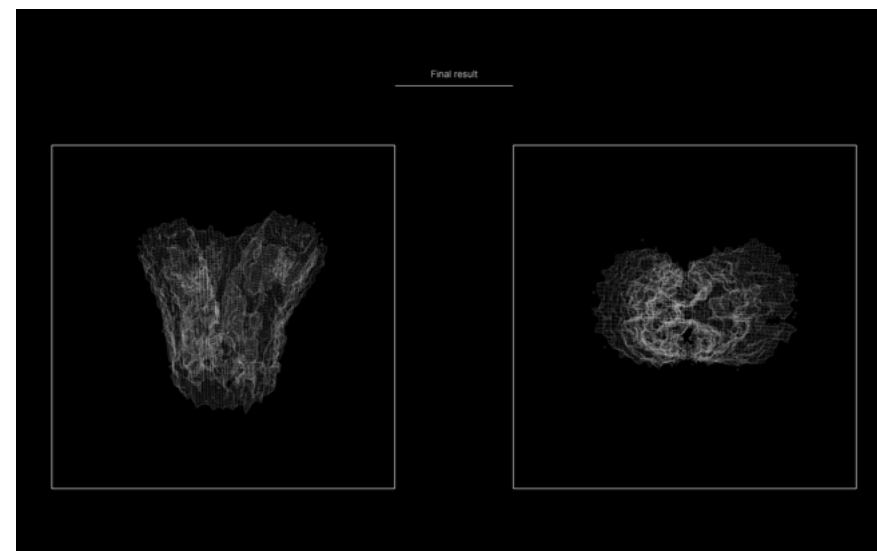
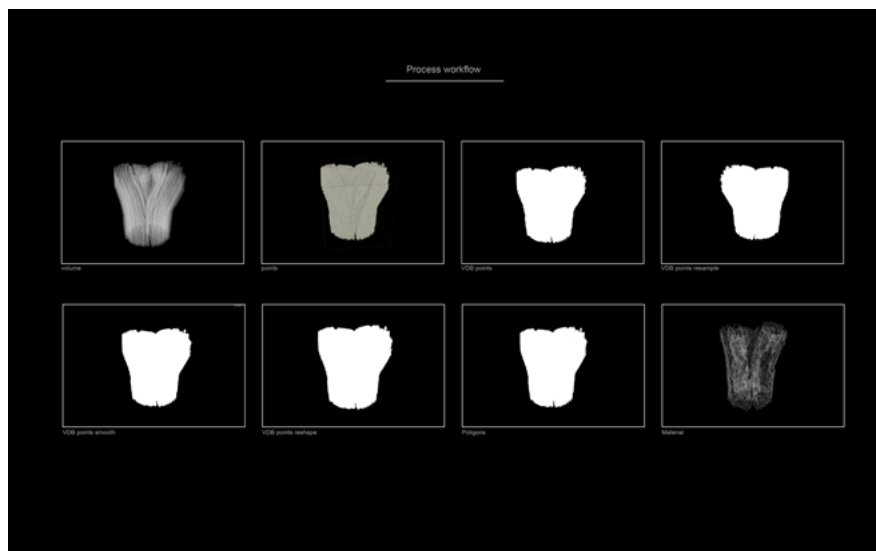
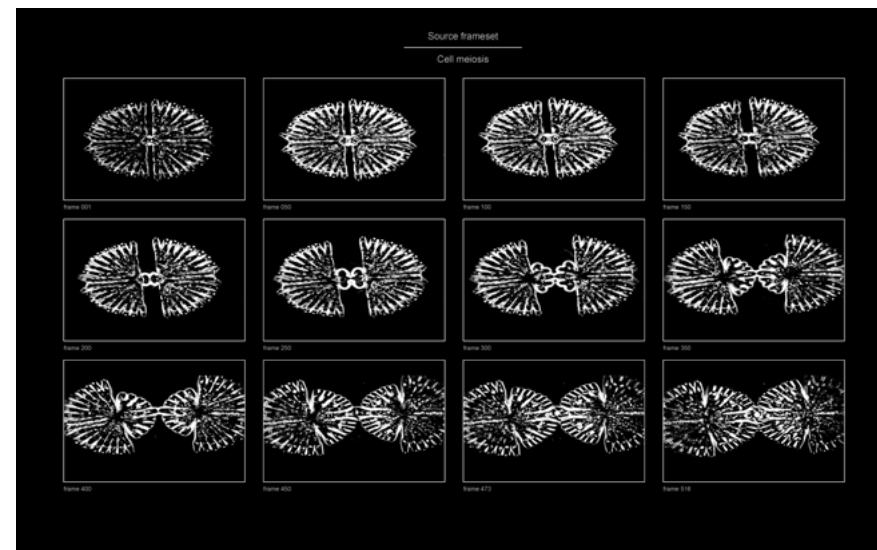
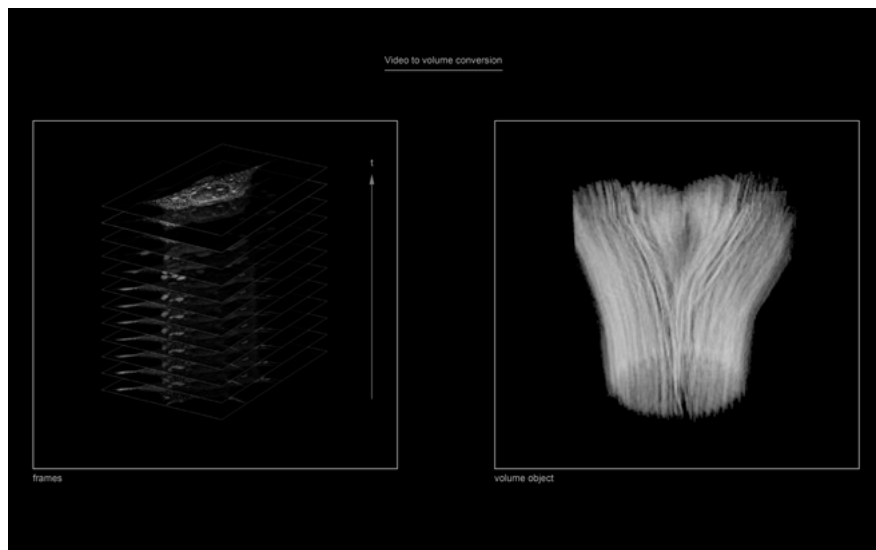
3D sculpture, AR installation

As a basis for the work, we take video documentation of the breakdown of a nerve cell, as well as its division and reaction to light. To see the morphology of these processes, their internal and external organics, to describe these processes visually, it is necessary to string sequentially second by second, shape by shape, volume by volume. Thus, sculpture grows, which simultaneously exists both in time and in space, in volume. Moreover, the volume represents time. Thus, a static sculpture arises from a dynamic process.

We use the translation of the time axis into the coordinate axis in order to visualize and reflect on what a person lacks cognitive abilities in real life.

The Piaget phenomenon is a psychological phenomenon consisting in the impossibility of comprehending such characteristics of surrounding objects as quantity, size, volume or length of time.





Mobile AR presentation of the sculpture

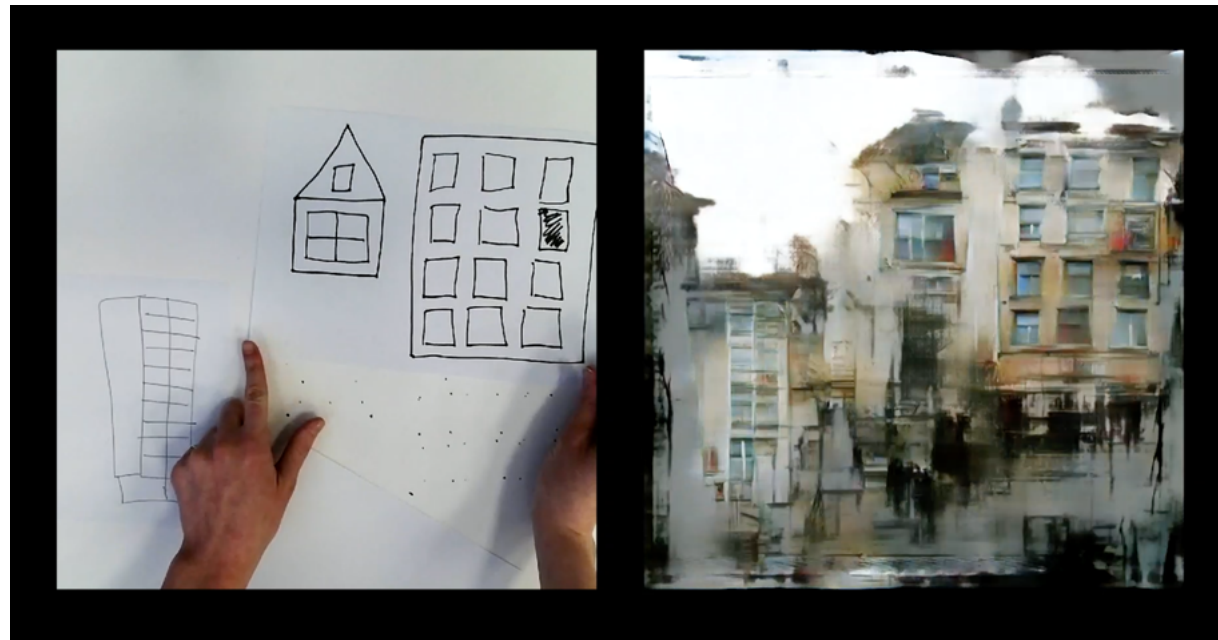


Mobile AR presentation of the sculpture



## «VREMYANKA», 2020

The video is based on the idea that any image or object can be interpreted only within the previously obtained visual experience. Technically, this was implemented using the CGAN neural network, trained on a photos of the facades of houses and buildings. The movement and repositioning of objects serves as a starting point for the generation of various textures and patterns, interwoven between each other in search of a new geometry. The constant change in the building reflects the impossibility of choosing one specific design, and such inconstancy makes it possible to go beyond the limits of statics into a dynamic architecture.

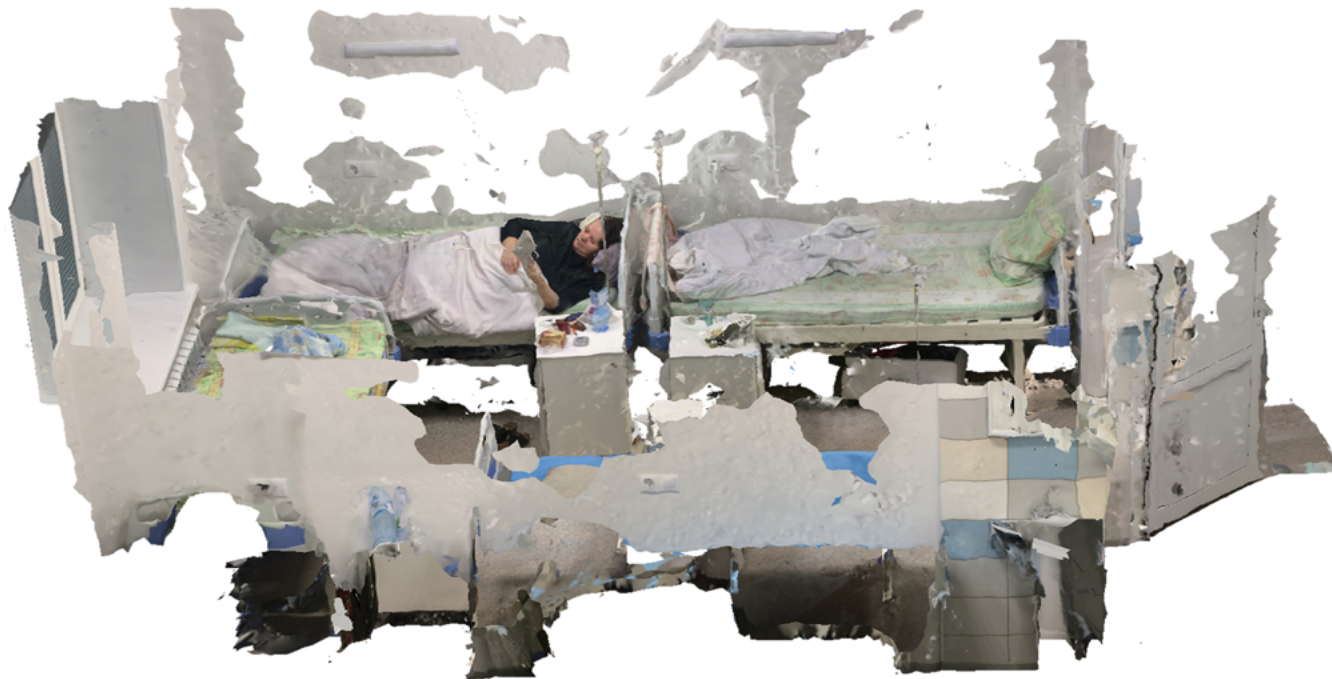


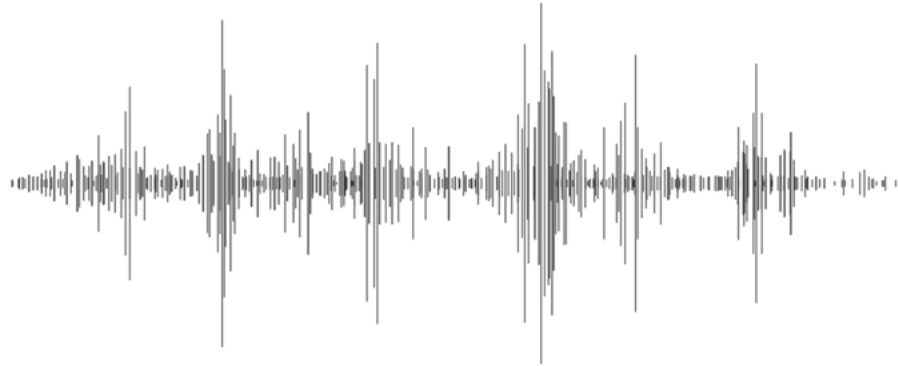
Video <https://www.youtube.com/watch?v=VAIgM6JcZ40>



## «Nina», 2019

Nina - VR-installation, with the help of which memories of being in an infectious diseases hospital are recreated. Nina, a roommate, shares memories of her life. She accidentally arrived more than forty years ago in the city of Vladivostok. She tells funny and sad stories from her past. The unrelated narratives become integral in time, and after listening, it becomes clear: these stories are the incredible and touching life of a real person with a difficult fate, the stories from which resemble the plot of a movie. Life concentrated in a hospital ward and accidentally finding its viewer.





Video <https://www.youtube.com/watch?v=ioBn7B903P0>

## «Conductor», 2019

Sound and light performance: audio modulation by light emission of LED lamp caught by photoresistor, webcam and body. Sounds modified in Pure Data software.



Video <https://www.youtube.com/watch?v=1UDR0rAnF5A>



## «Game over», 2019

The Vladivostok fortress - twelve forts and many other fortifications - was erected in the late XIX and early XX centuries. It was the most fortified of the fortresses existing at that time, thanks to which she never took part in hostilities.

We used freeze light technology (no photoshop) to expose the historical photographs of the real people in real locations of the Vladivostok fortress. Blending the past and the present with the help of modern technologies, we create new meanings and reflect on the historical heritage of the local context.











## «SNOUM», 2018

A dream is a succession of images, ideas, emotions, and sensations that usually occur involuntarily in the mind during certain stages of sleep (wikipedia). Dreams are considered to be related to the phase of rapid eye movement – a sleep phase, characterized by increased brain activity. The mechanism for changing the phases of sleep has not been fully studied, but there are studies according to which a change can occur due to a neural switch located in the medulla. During the phase of rapid eye movement sleep, the brain «filters» the information received during the day, discards the unnecessary, secondary. Images and sensations arises as an incidental products of this technical task.

SNOUM partially mimics the mechanisms of dream generation by human mind. This neural network will «imagine» and show the viewer his dreams on a screen. Viewer just have to start to describe aloud his dreams. Yes, it will not be exactly the same dream that someone seen. But SNOUM repeats the ritual of spontaneous situations arised in a dream. Rough objectification by converting a dream into words, and words into an image.



