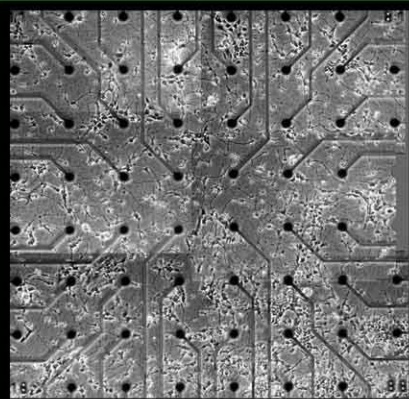


Rat neurons are plated on a Multi Electrode Array - 60 electrodes. This technique allows simultaneous electrical stimulation and recording of neural activity in the culture.

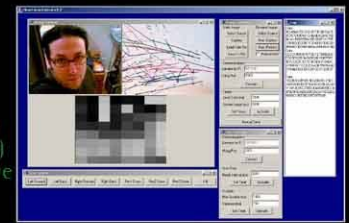


The rat cortical neurons spontaneously grow and interact within the culture to form a biological neural network.

Stimulation map is processed and sent to the neurons.
The stimulation frequency is determined from the 8x8 pixel grid of error values.

The 64 pixels downsampled image is then converted to a stimulation map and sent to Atlanta

The original captured image is compared to the progression of the drawing (in one minute intervals) - The result of the comparison is downsampled to 64 pixels (8x8) that correspond to the structure of the electrodes fitted on the neuron dish (MEA)



A Video Camera monitors the progress of the drawing



Drawing Starts Here
A video camera in the gallery captures an image of a person

Start Here

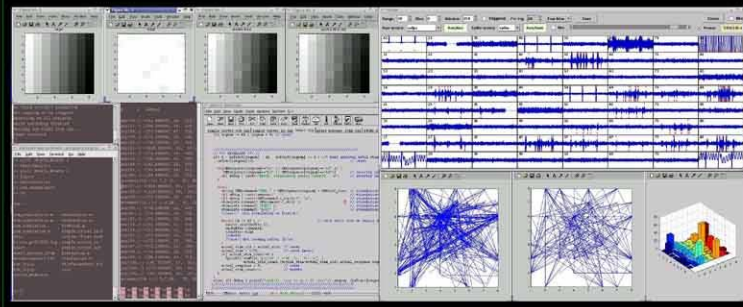
The Laboratory for Neuroengineering at Georgia Tech
Prof. Steve M. Potter

ATLANTA

Meart - The semi Living Artist Drawing Portraits

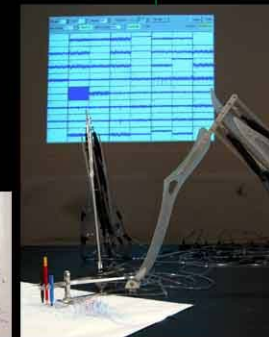
Meart is a bio-cybernetic geographically detached artist. Its brain is housed in the Potter lab (Atlanta) and its body (Drawing Arm) is located in New York. The project explores epistemological, ethical and aesthetical issues concerning the use of living neurons for ethno-centric end.

Computer program analyzes and processes signals that are received from 60 areas in the culture



NEW YORK

The ArtBot's Show, Eyebeam Gallery



Arm Draws

Computer Program to decode the data sent from Atlanta and control the pneumatic muscles of the arm