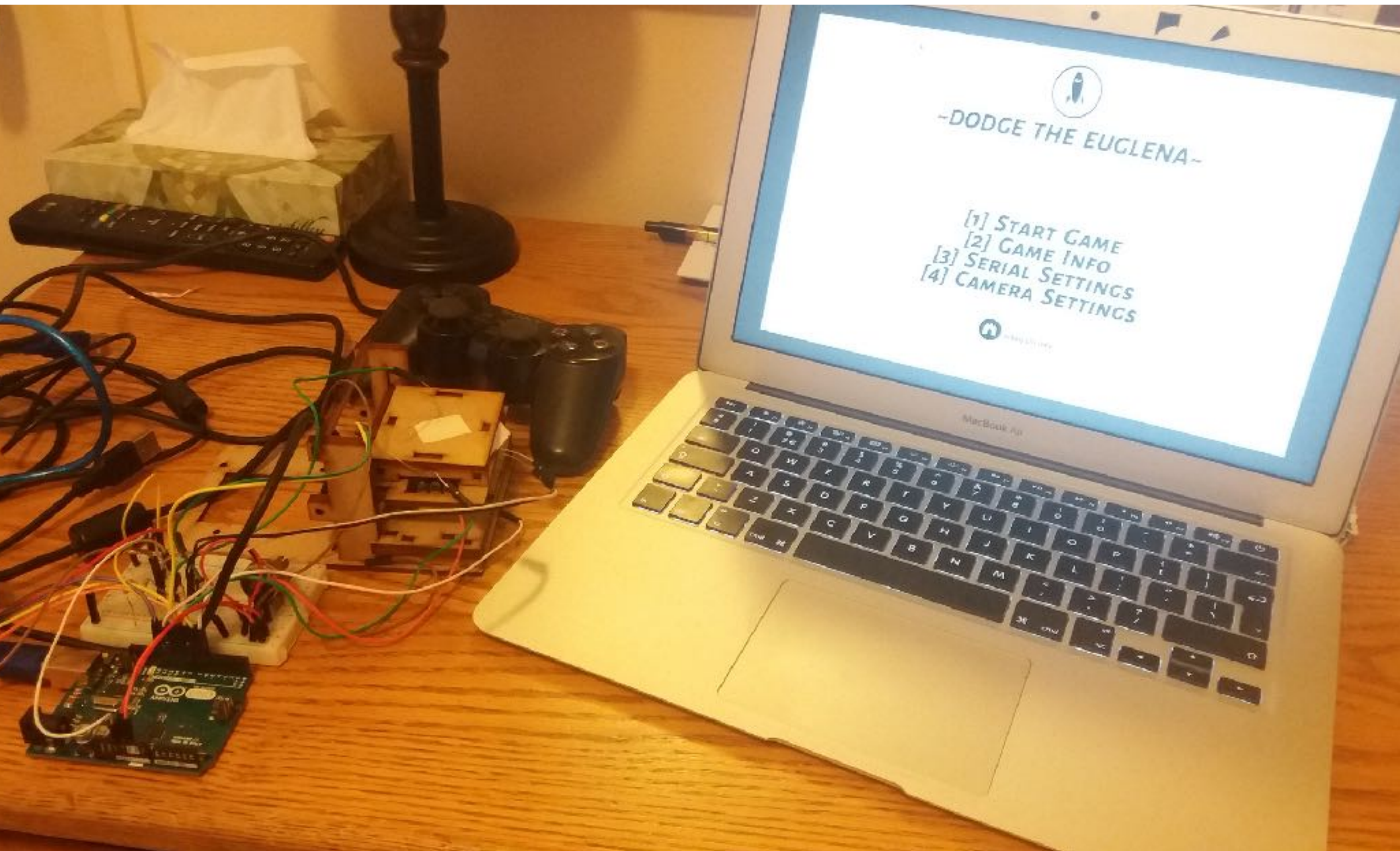




Biotic Gaming





Biotic gaming

a biological – computer game

interact with tiny animals in a computer game



Team

Prof. Ingmar Riedel-Kruse

Frido Emans

Roland van Dierendonck

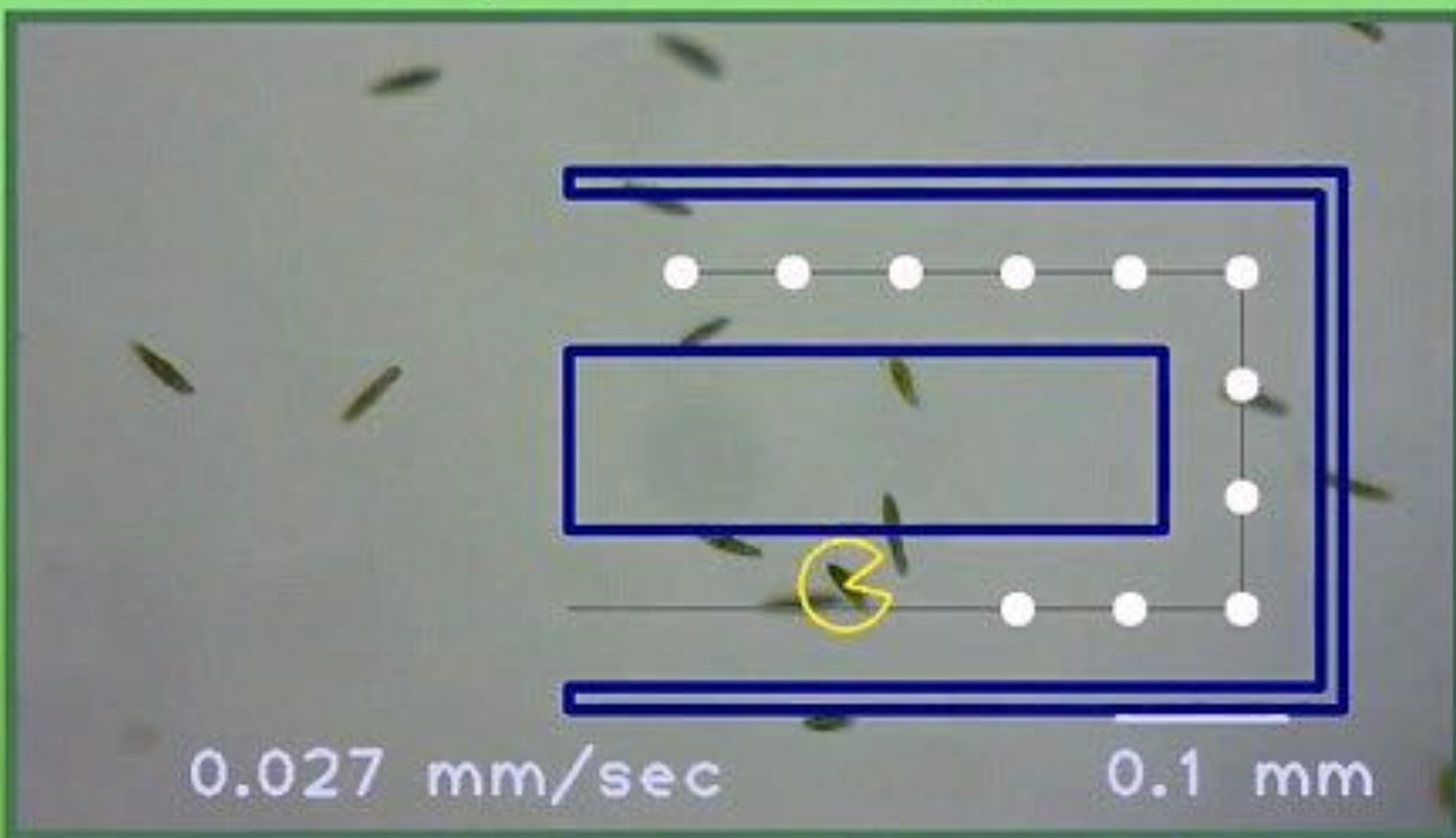
Federico Muffato

Christian Schultz



Pacman

End



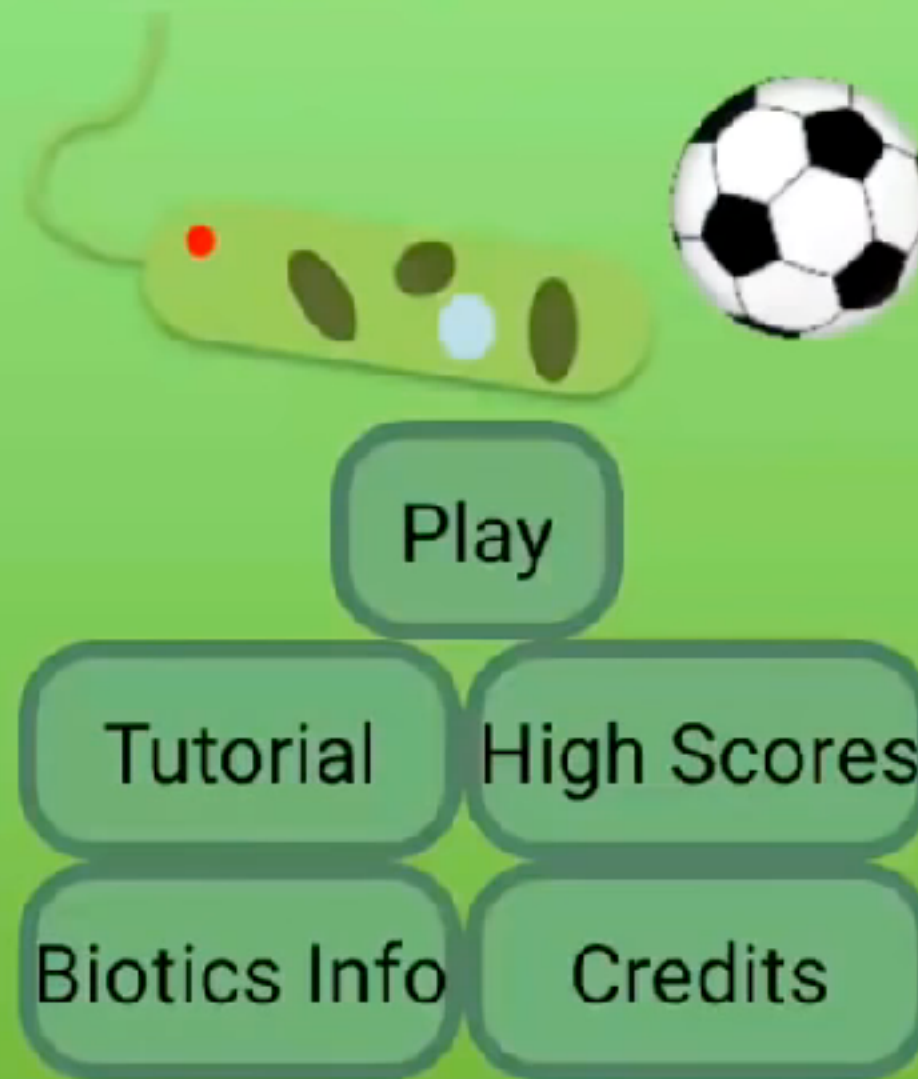
Time: 9





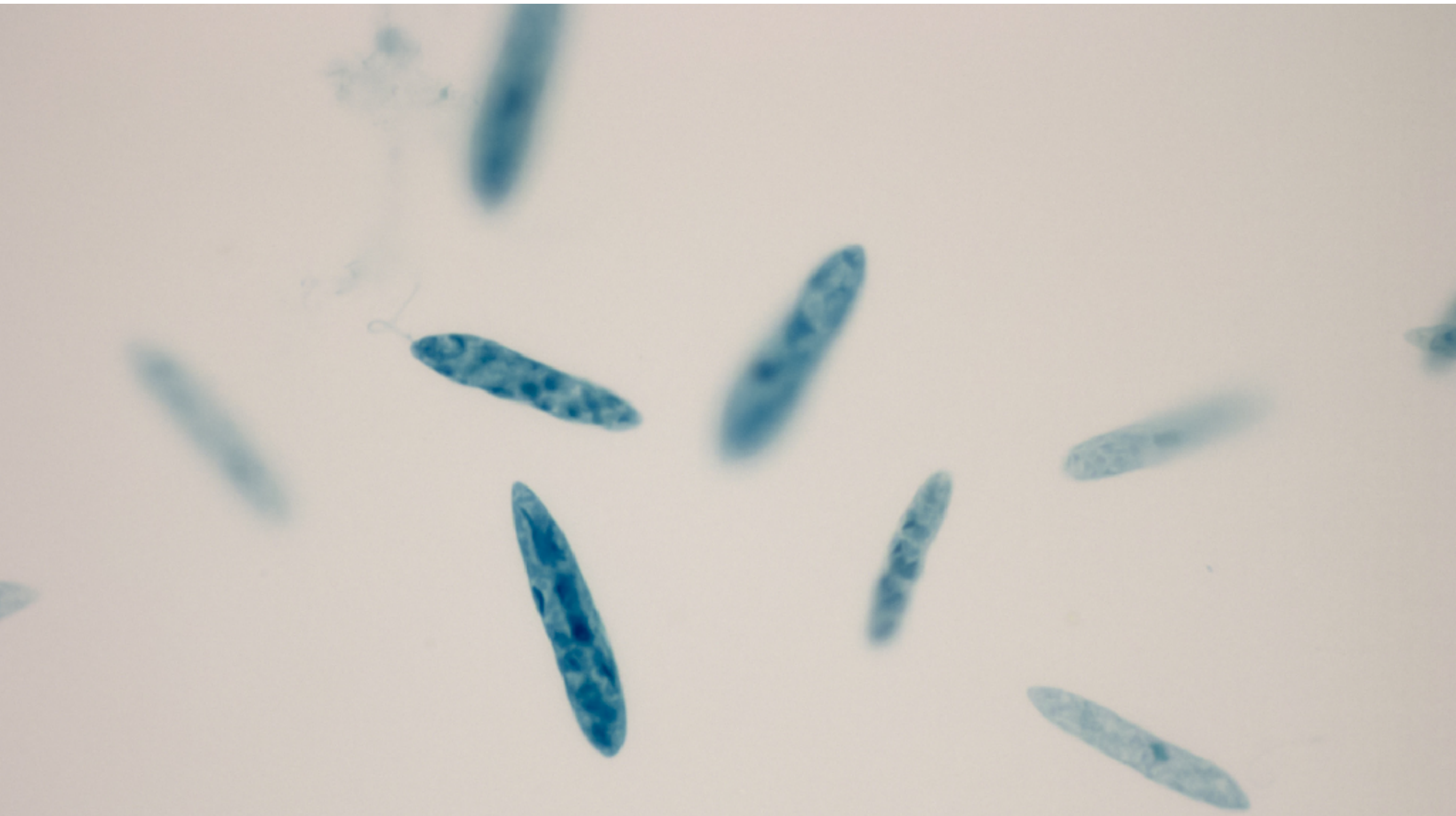
Examples

Euglena Soccer



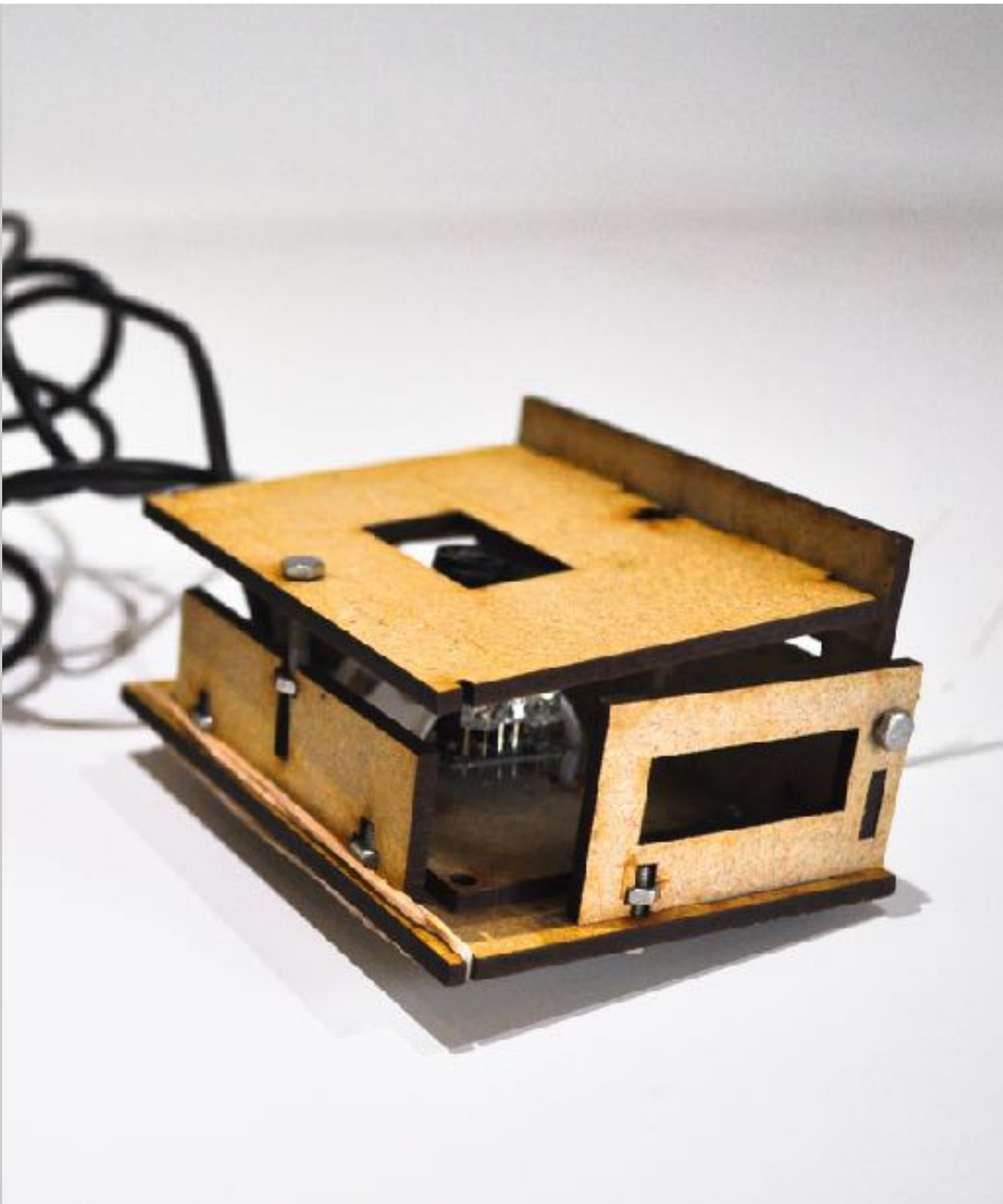
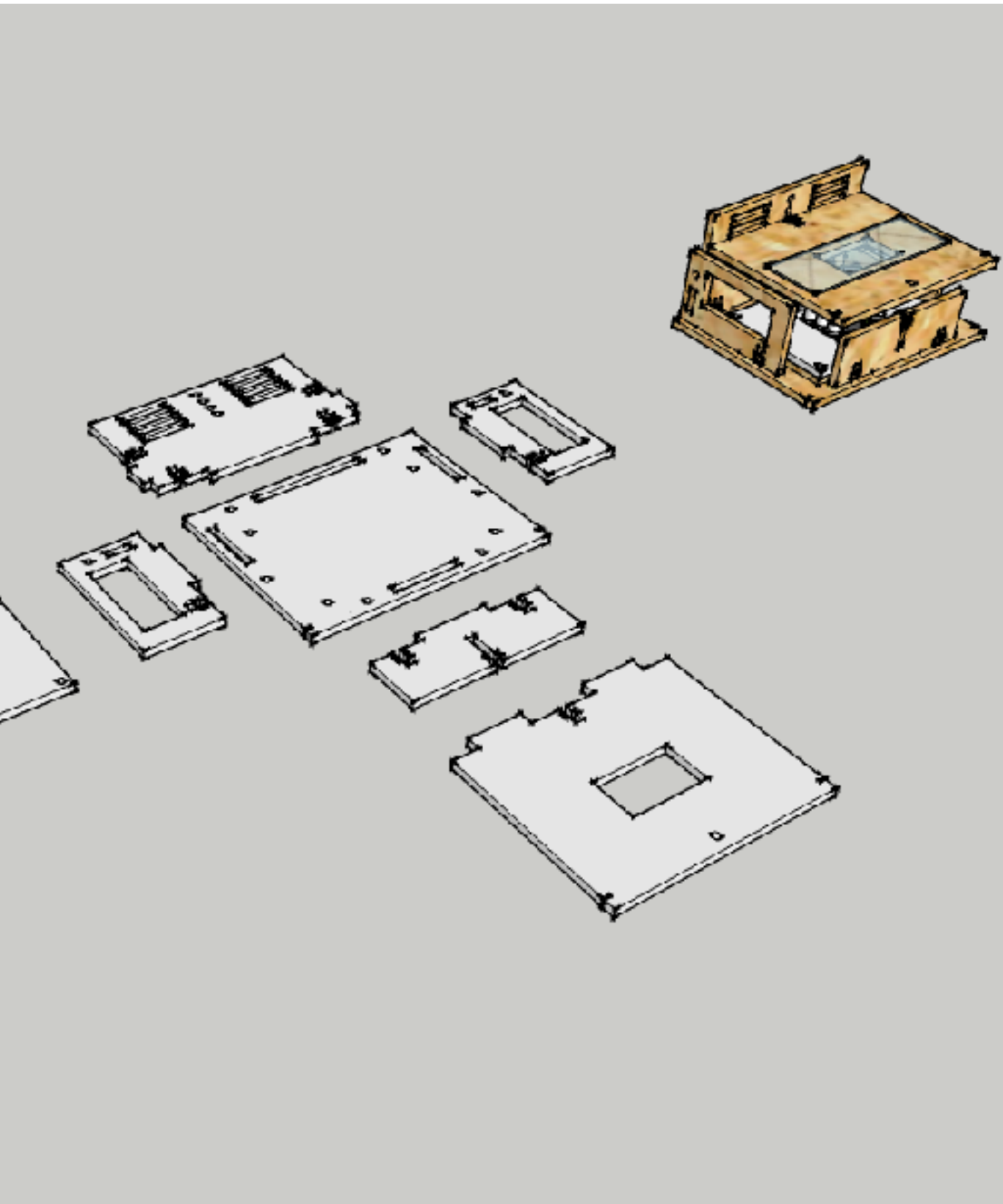


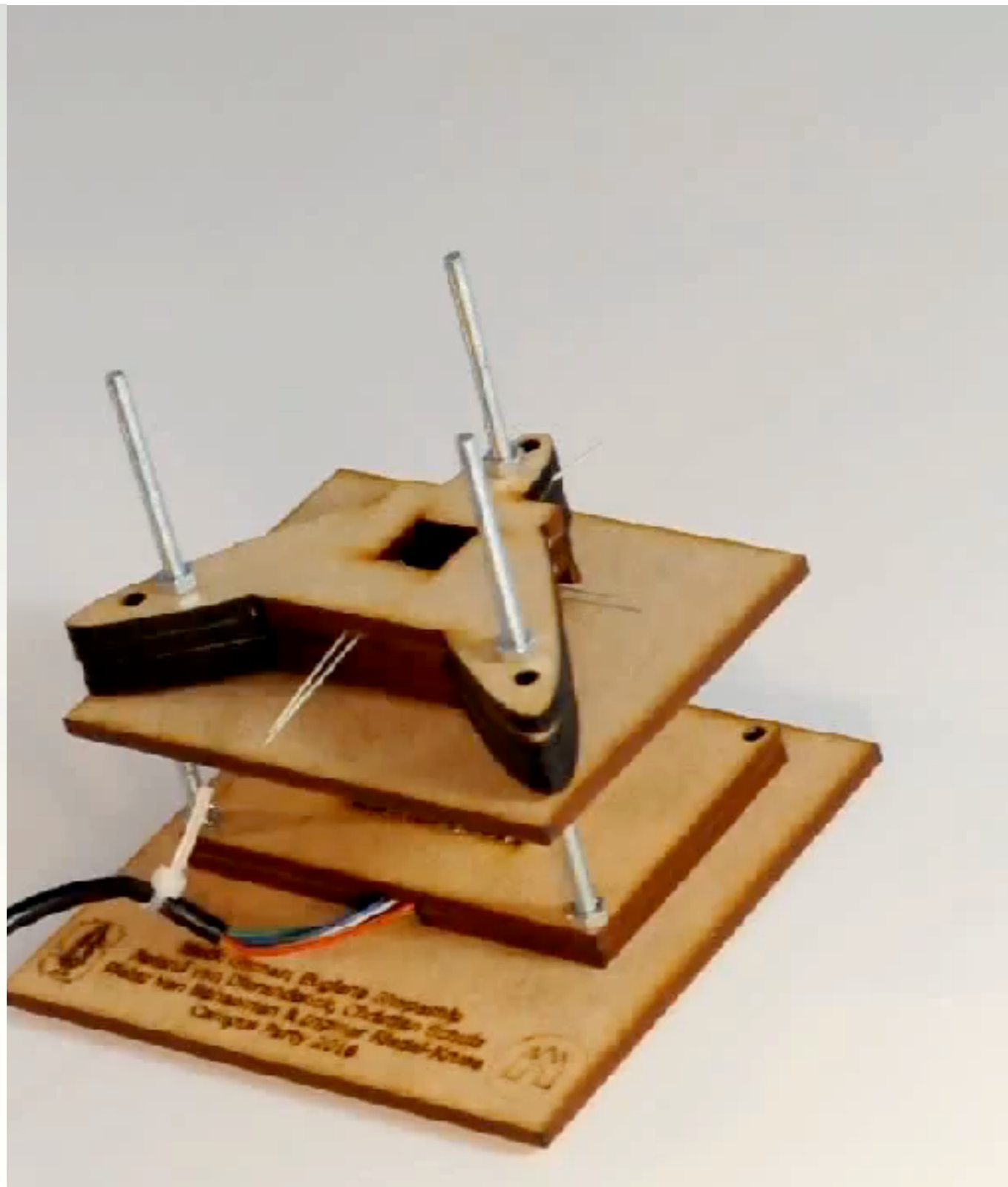
Euglena





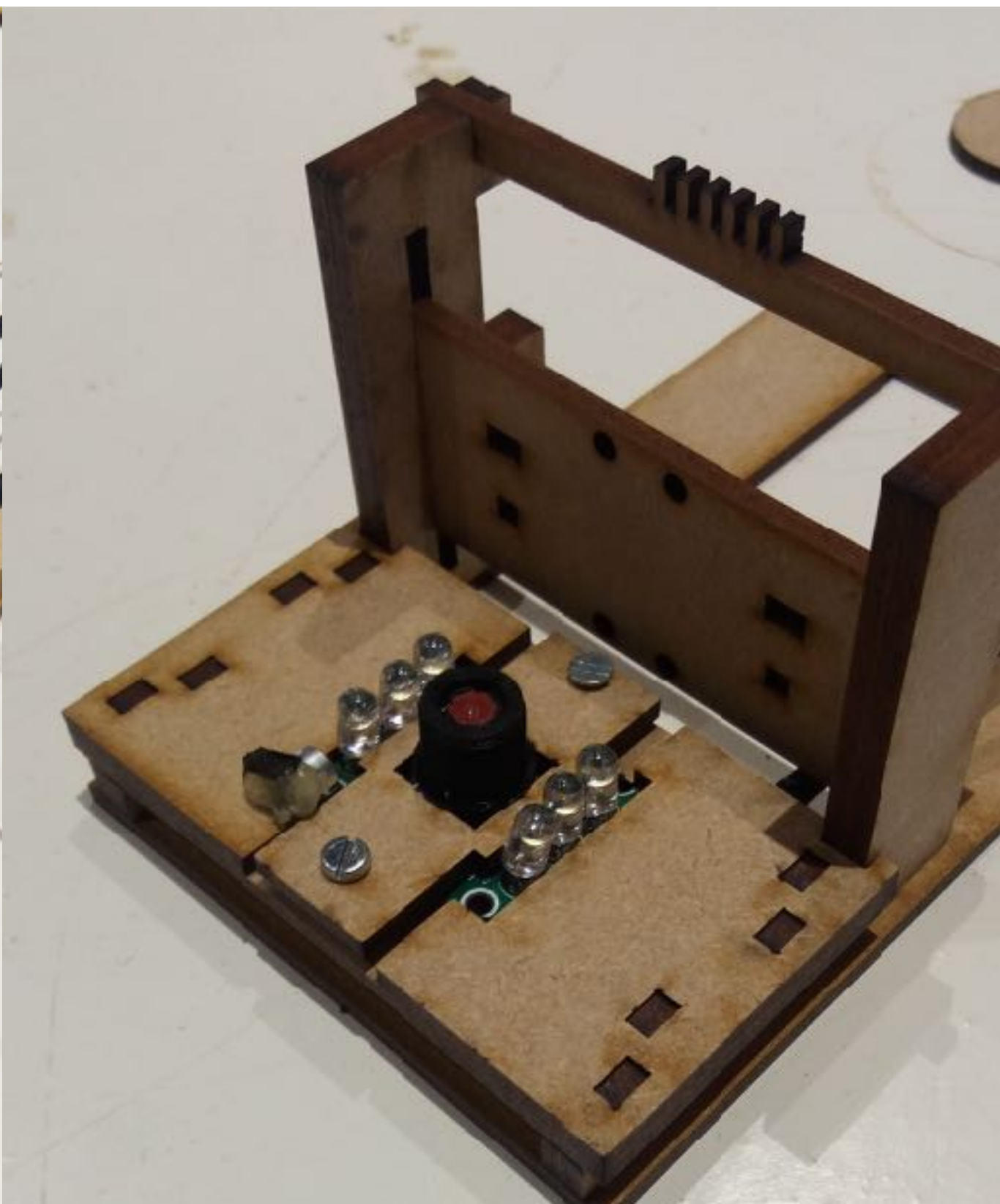
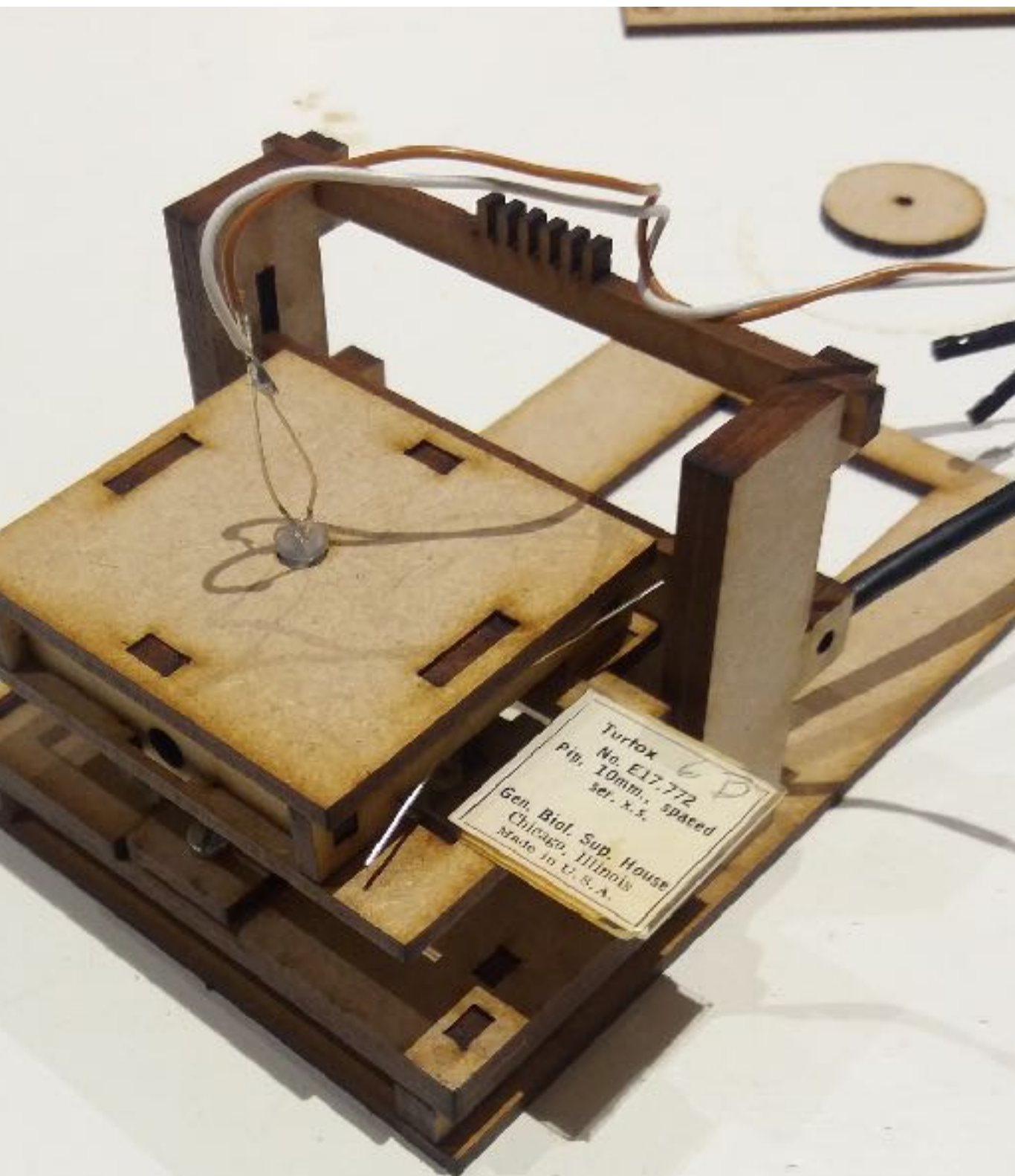
Webcam Microscope





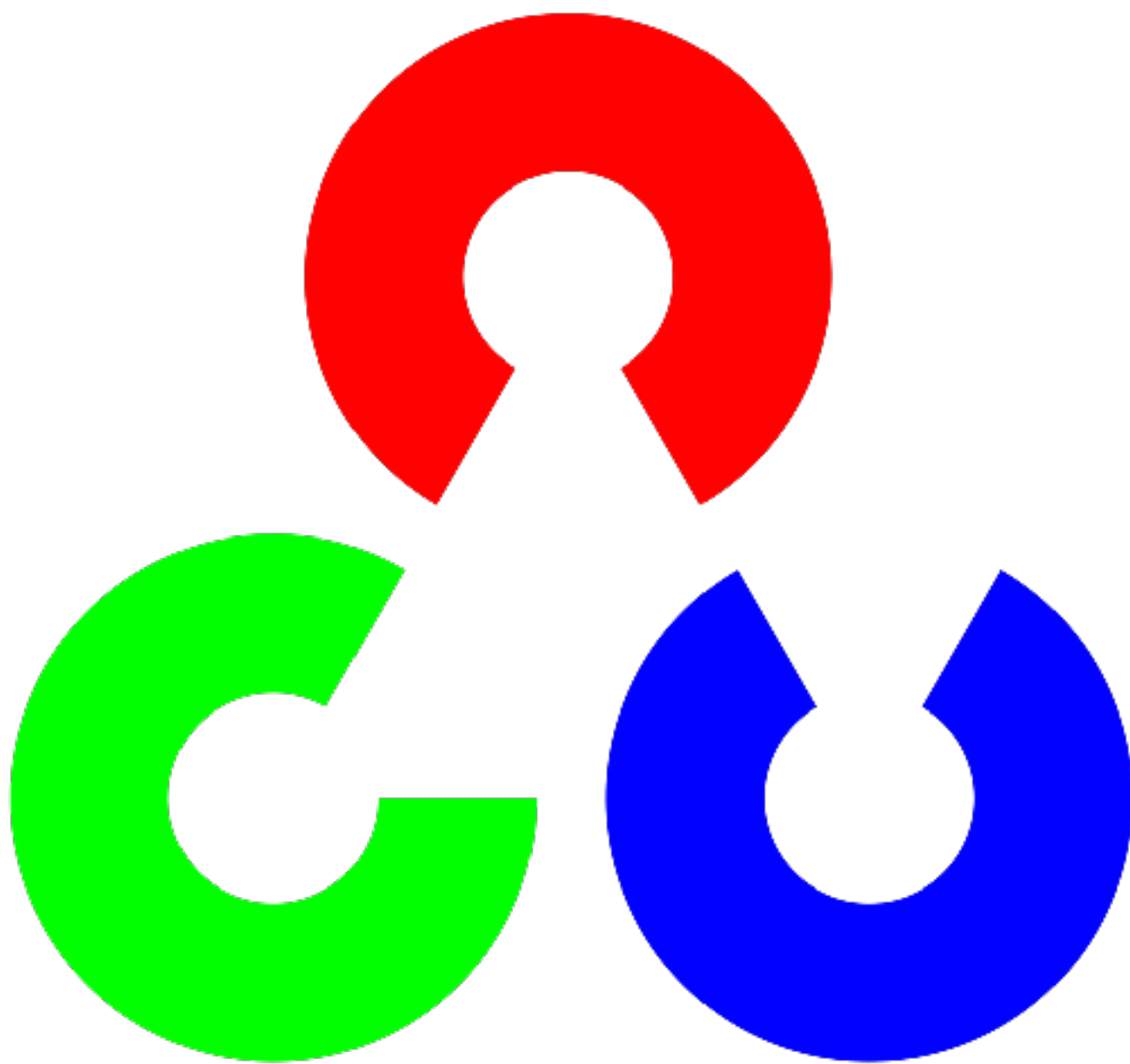


Latest version





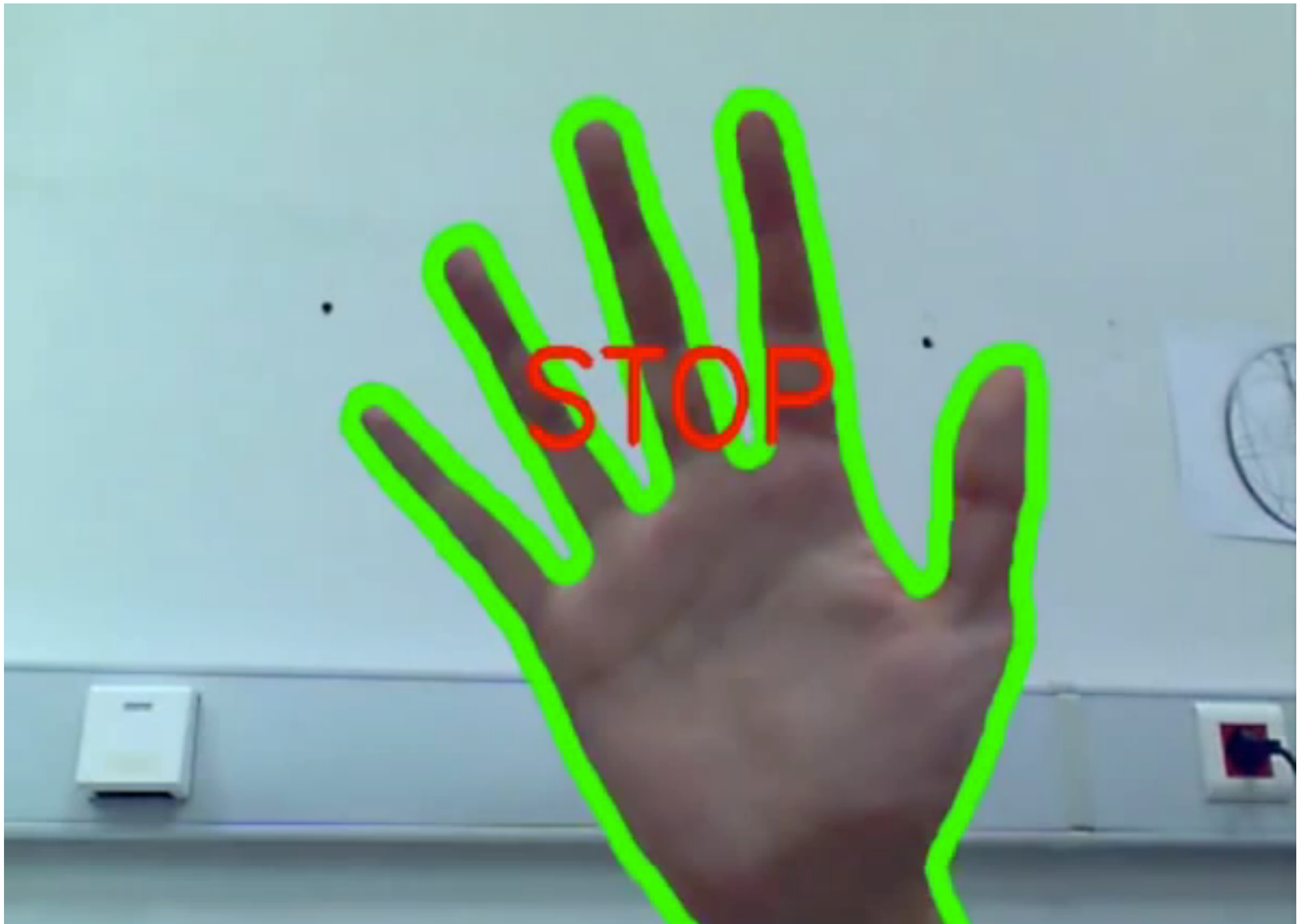
Open Computer Vision



OpenCV

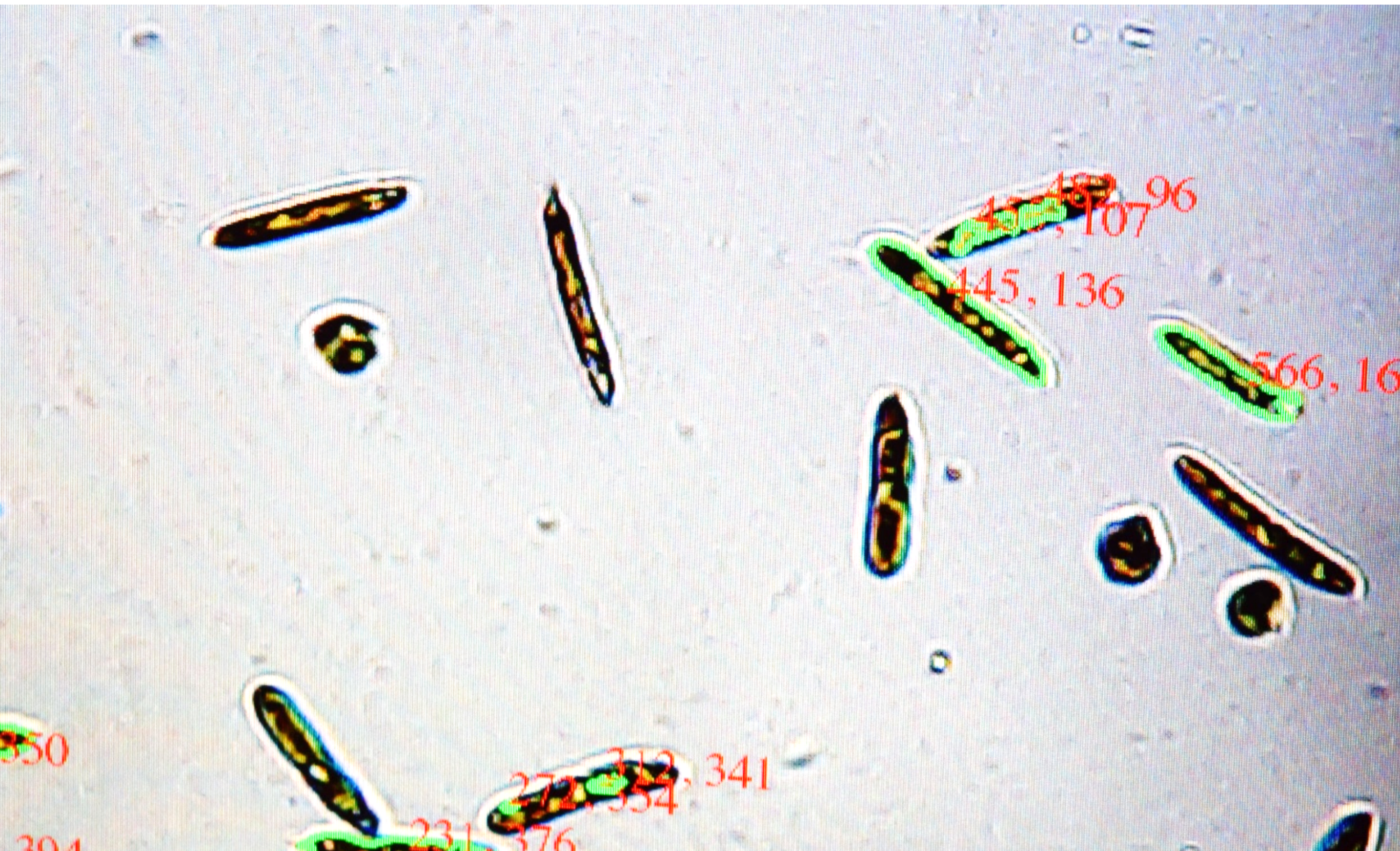


Hand gesture recognition



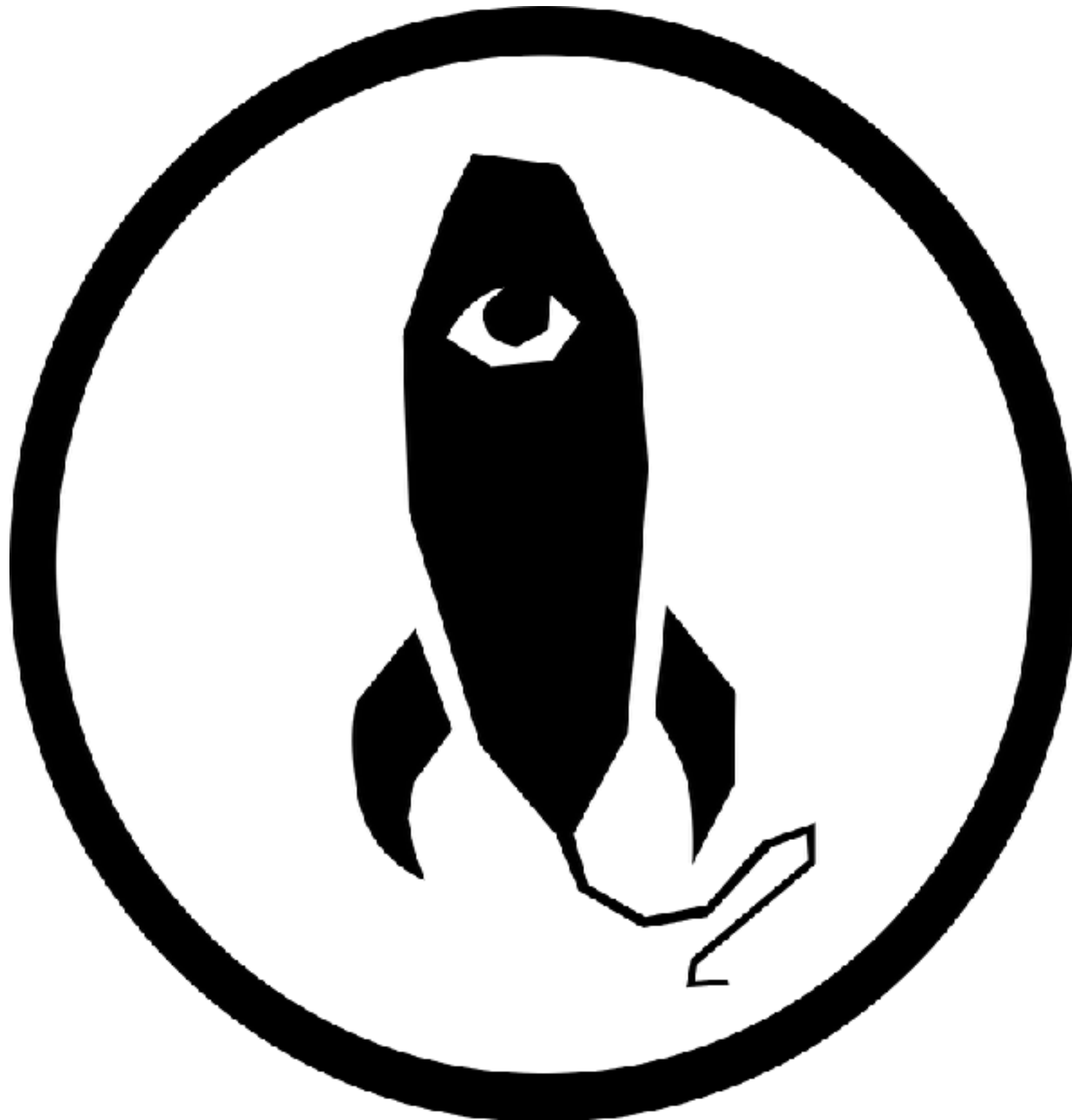


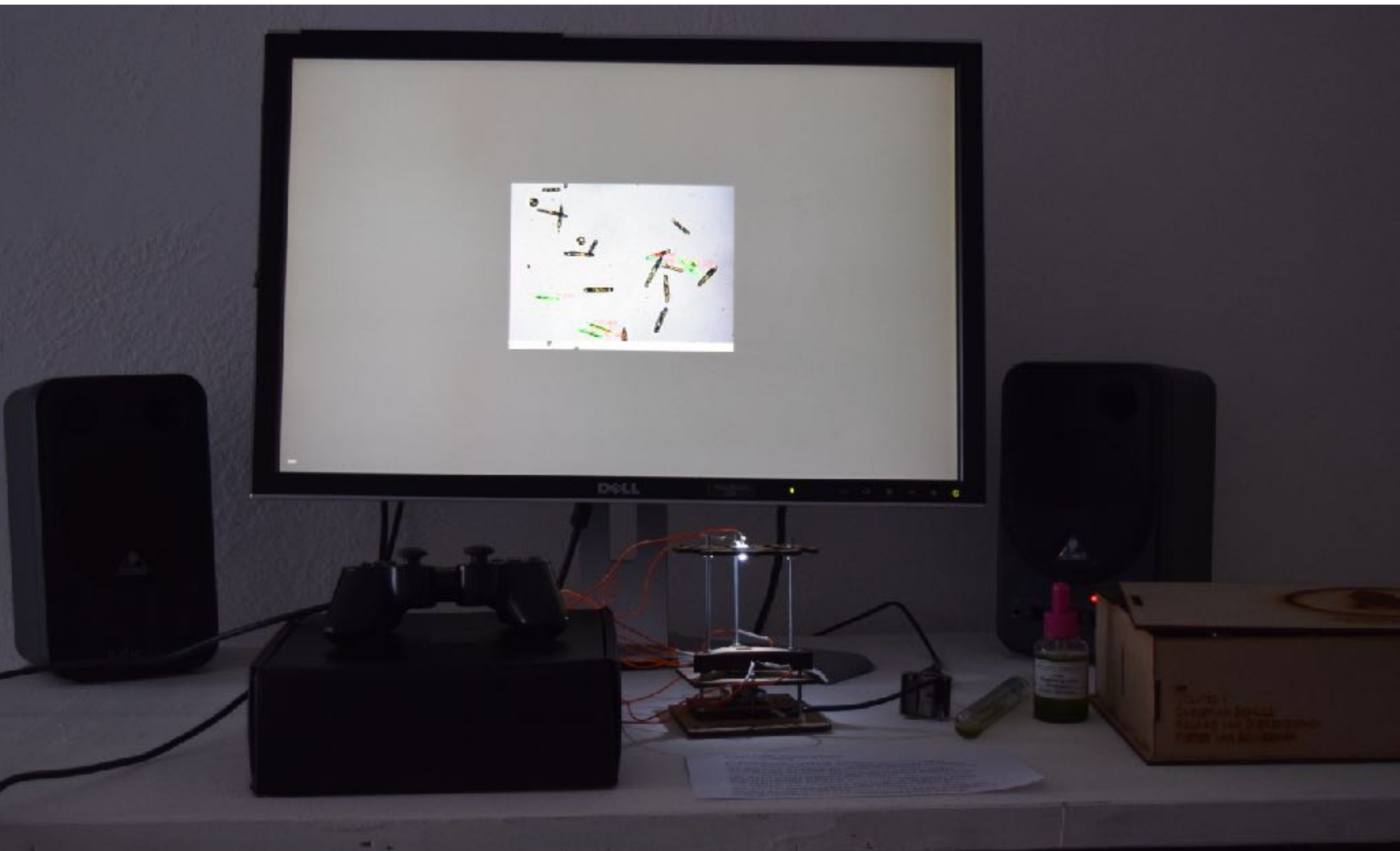
How does Euglena game work?





Euglena Space Ship







Sources

- <https://github.com/PieterVanBoheemen/Euglena-spaceship-kit>
- <https://github.com/biohackacademy>
- <https://processing.org>
- <https://www.arduino.cc>

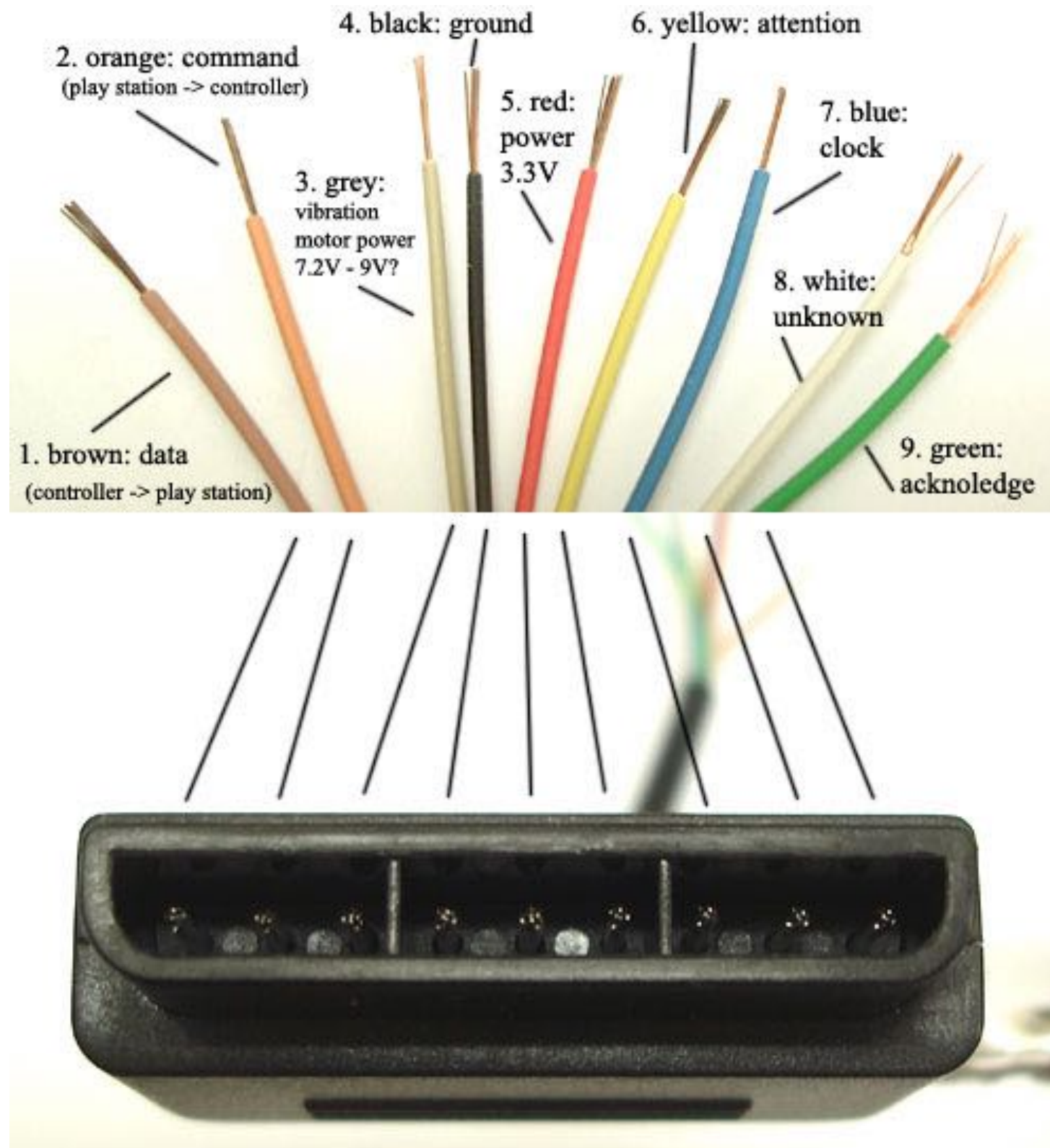


PS2 controller



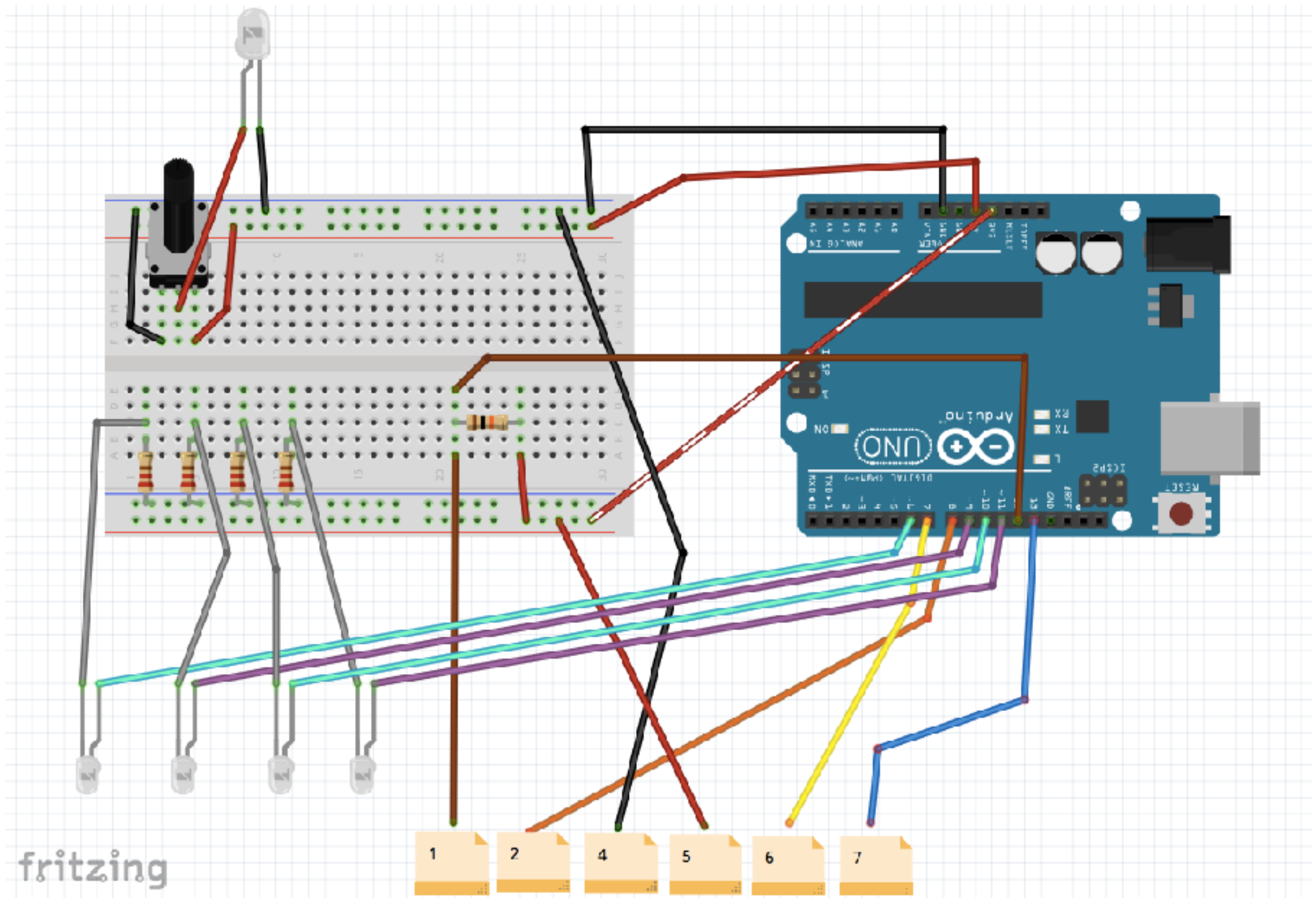


PS2 Controller





Wiring



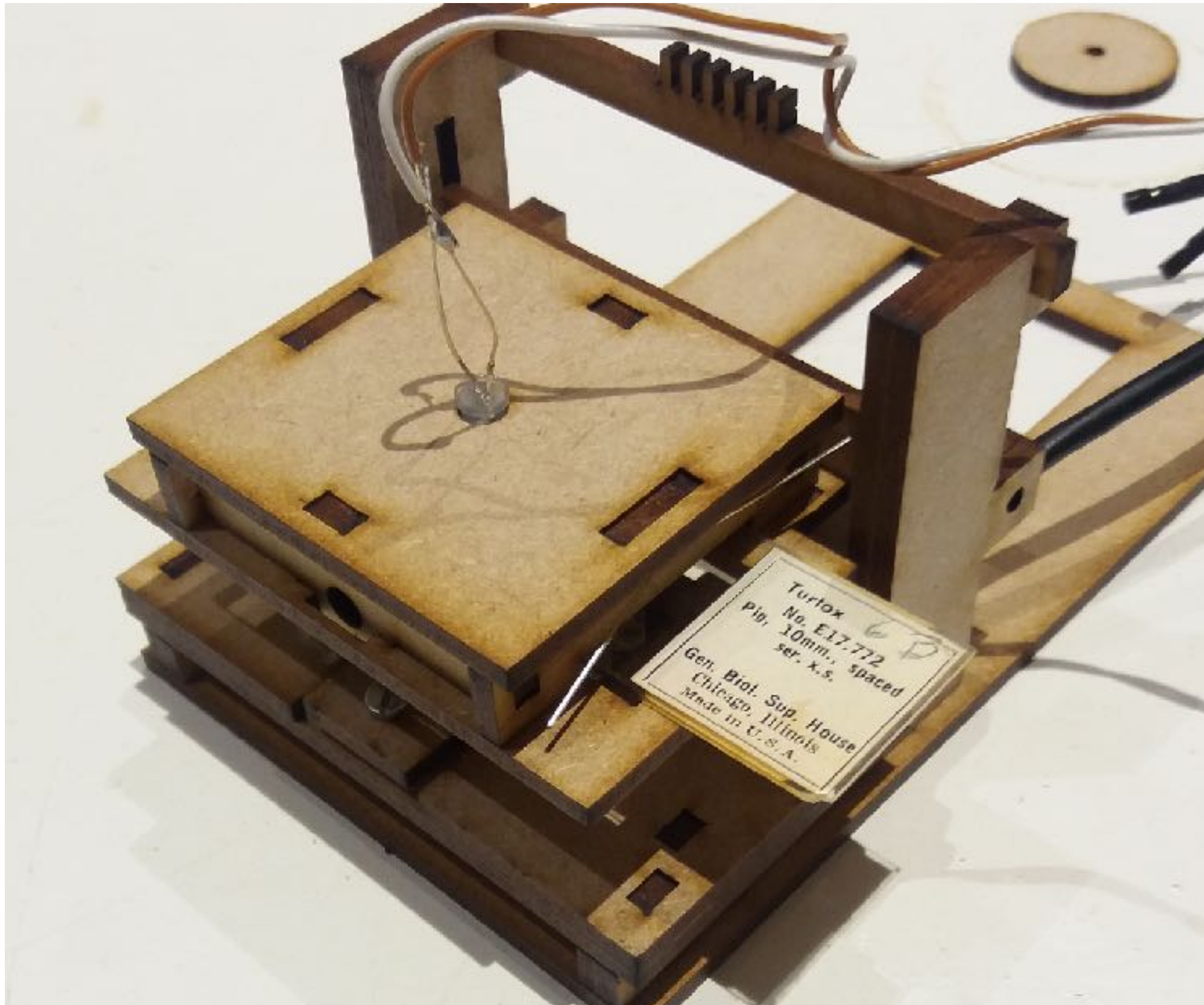


Upload the Arduino code

- Check the serial port for readings
- Test LED commands
 - w: up
 - a: left
 - s: down
 - d: right
 - p: increase intensity
 - l: decrease intensity



Assemble the microscope





Play the game



~DODGE THE EUGLENA~

PRESS KEY:

- [1] START GAME**
- [2] GAME INFO**
- [3] SERIAL SETTINGS**
- [4] CAMERA SETTINGS**