BERGHS SoC CREATIVE TECH 2022

The goal of this course is to grow our understanding of how technology can be material for the field of visual communication and how it can change its practices. We are going to present creativity and literacy as a path to understand and embrace digital techniques and materials.

Subjects:

- Literacy and Agency
- Invention Literacy
- Lifelong Kindergarten
- Internet of Things
- Augmented and Virtual Reality
- Printing
- Computer Numerically Controlled
- Industrial Revolutions
- Creative Coding
- Conditional Design
- Poetic Computation

Achieved skills in:

- Prototyping
- Interactive Design
- Physical Computing
- Digital Fabrication
- Generative Art
- Parametric Design

"Only rarely does some exceptional event lead people to recognize their intellectual self-image in such a way as to open new perspectives on what is learnable."

Seymour Papert

Weekly Schedule
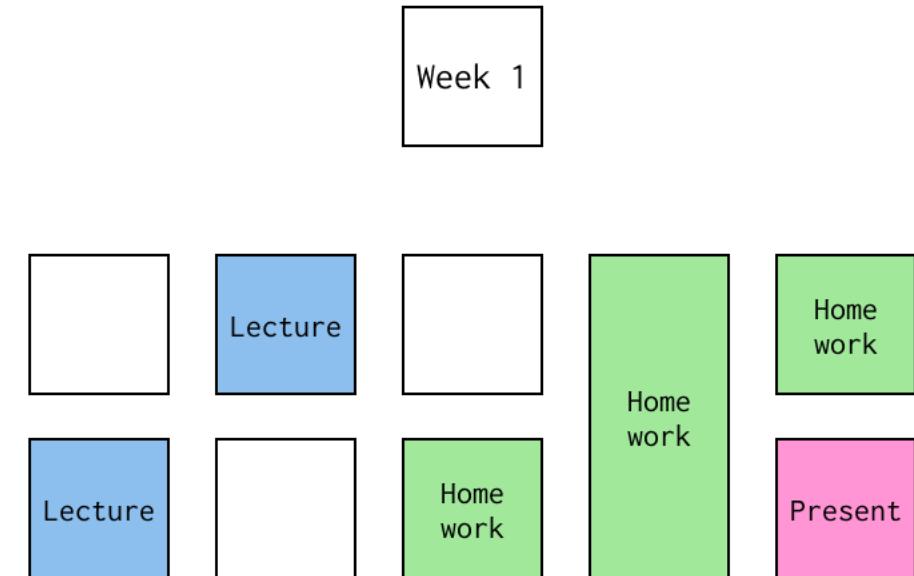
| Lecture | Office Hour | Homework | Present |
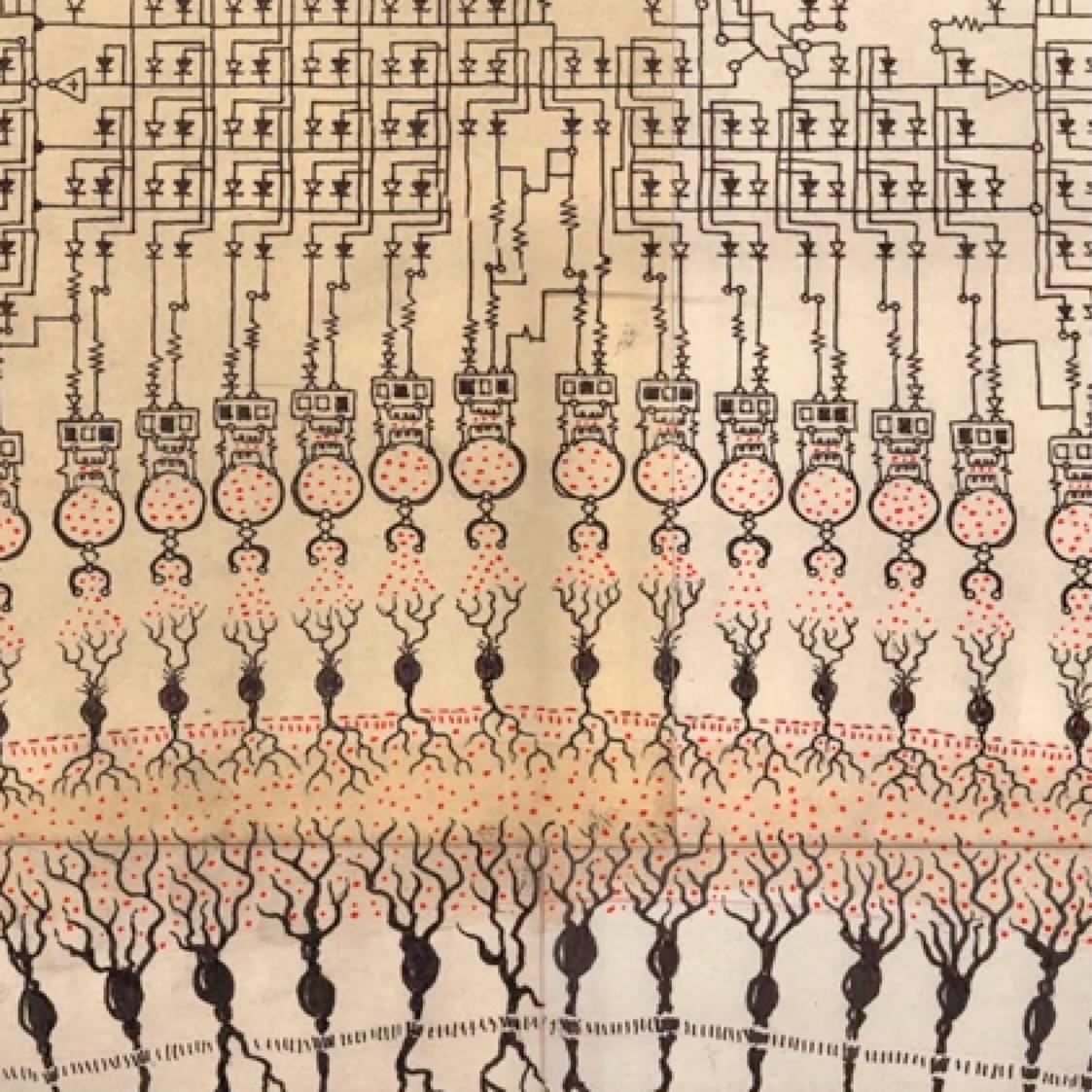
Design Journal

A daily collage of your learning.

Week 1

	Lecture		Home work	Home work
Lecture		Home work		Present

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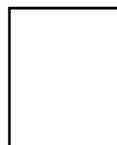
Week 2
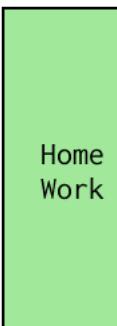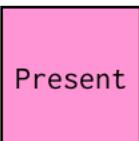
Lecture

Office Hour
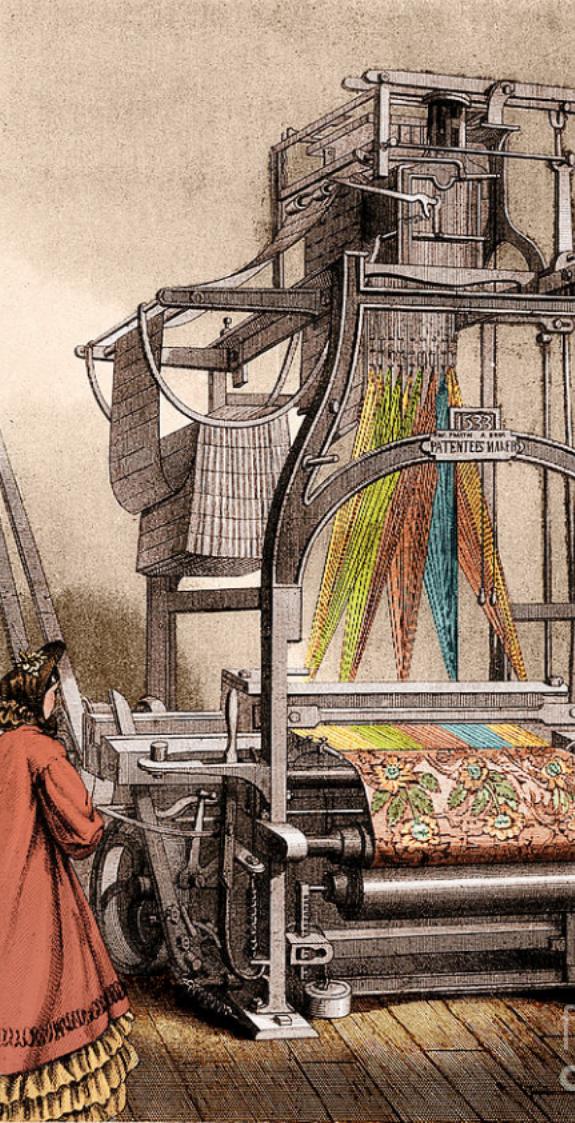
Home Work

Home Work

Home Work

Present

Week 3

Lecture

Home Work

Office Hours + Home Work

Home Work

Office Hours

|				
		Week 4		
Lecture	Office Hours	Office Hours	Present	
	Home Work	Home Work		
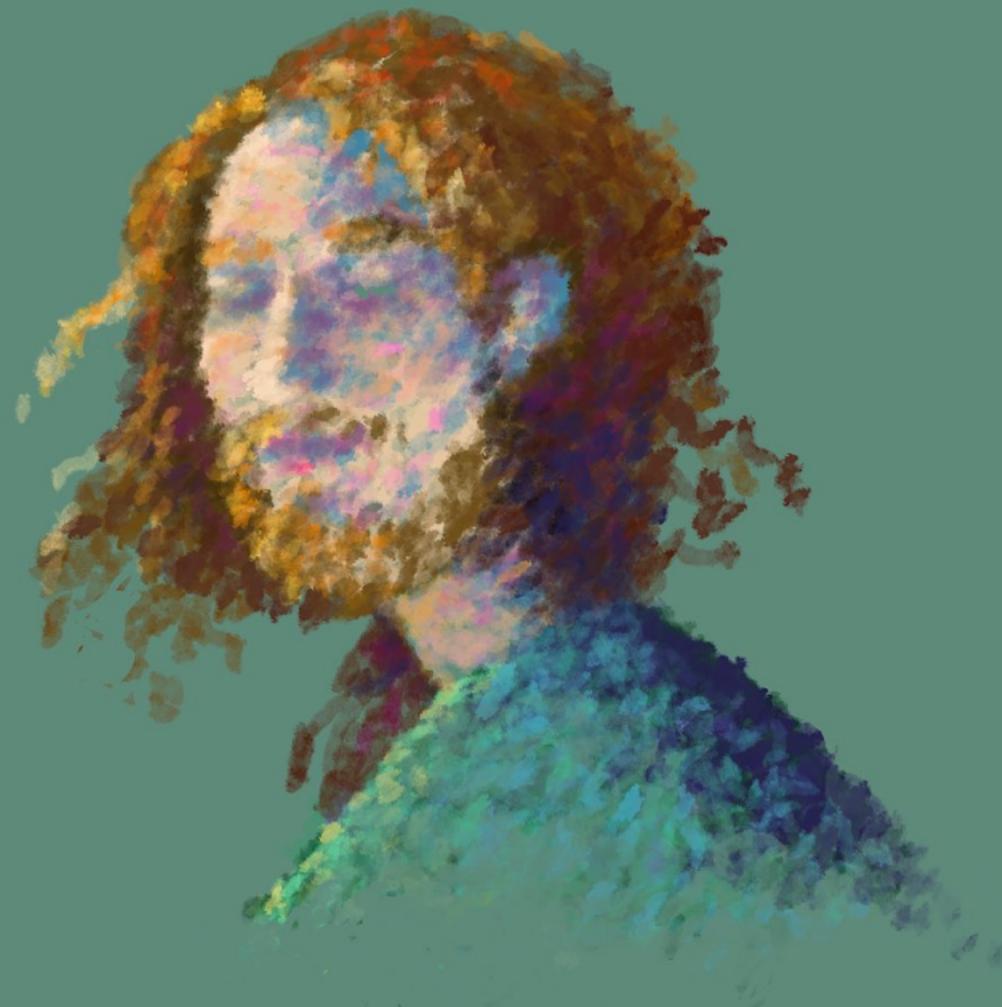
Creative Technologist

How creative uses of technology can
bridge and blur the distinction
between art and design and science
and engineering.

Prototype

Literacy and agency
Invention literacy
Creative Learning Spiral

Assignment:

Record a short video and present design journal.

Constraint: Can't buy anything. Use only objects available around you.
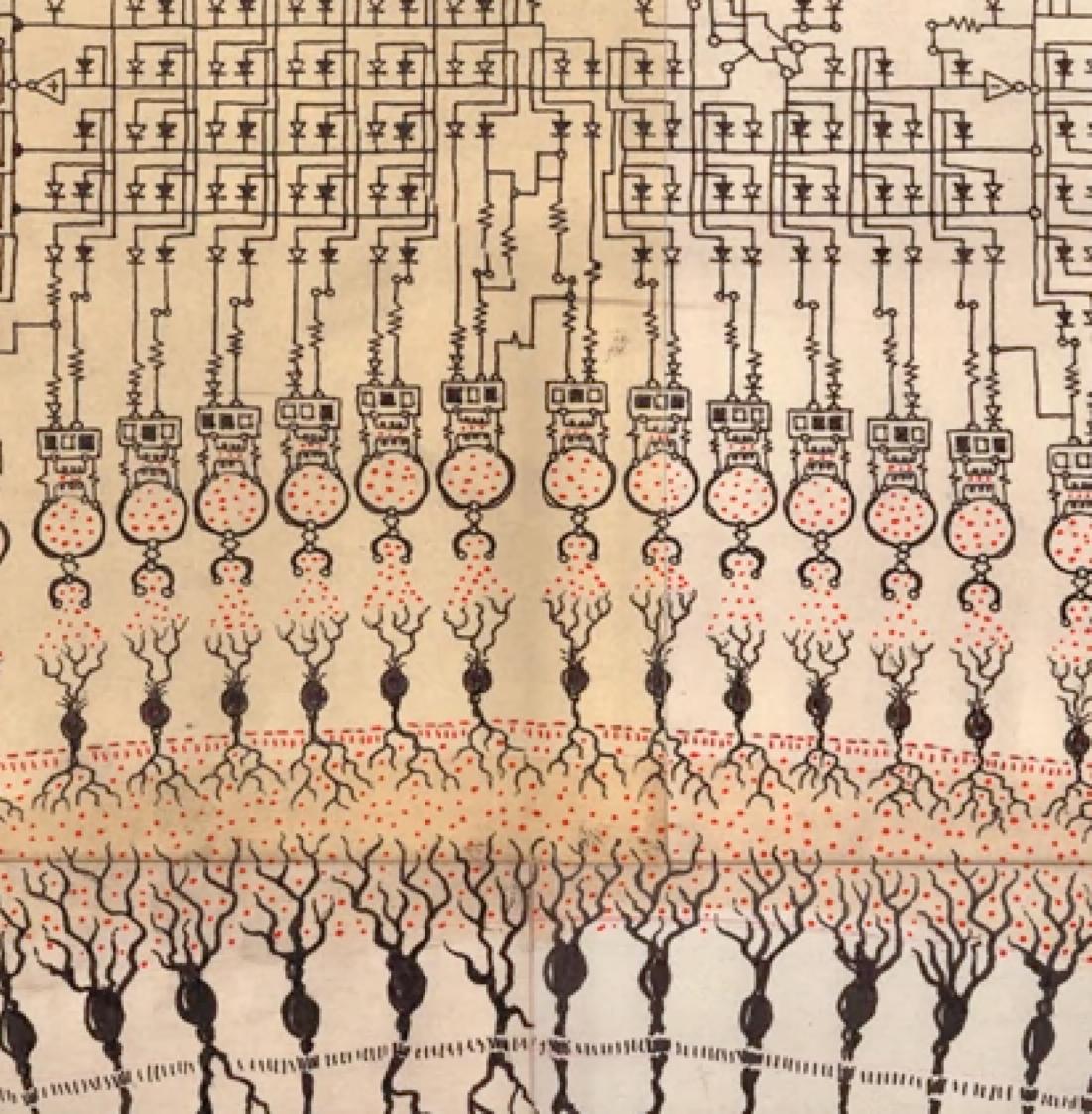
Options:
 · Perform on a musical instrument made with Makey Makey
 · Make a kinetic sculpture or a Rube Goldberg machine
 · Invent a life hack!

Banana Piano

Physical Computing

Atoms and bits
Internet of things
Augmented and virtual realities

Assignment:

Record a short video and present design journal.

Constraint: Use code to program a small computer.
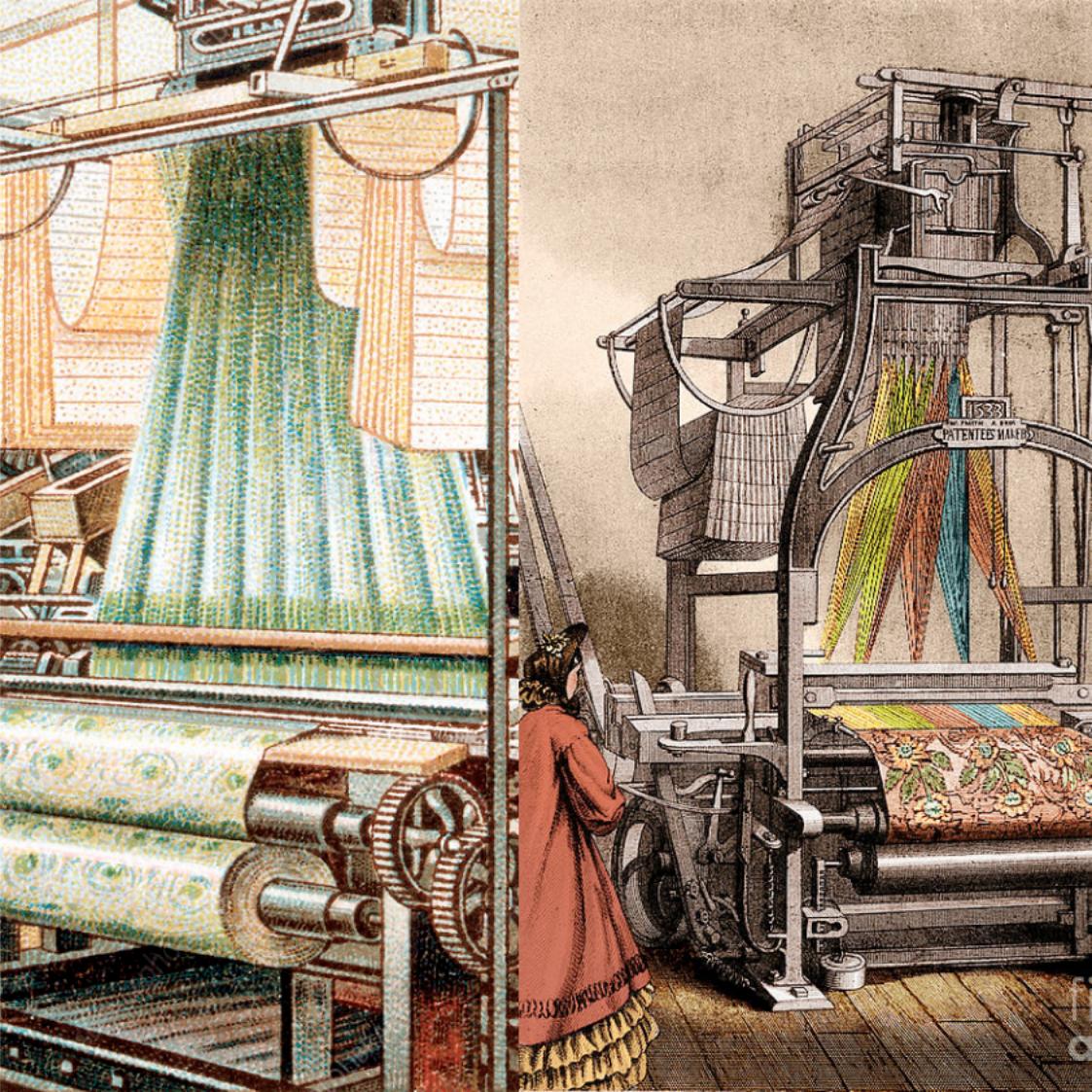
Options:

- Make a robot that walks
- Make an object that respond to the environment
- Make a clock

Digital Fabrication

Printing process
Computer Numerically Controlled
Industrial Revolution
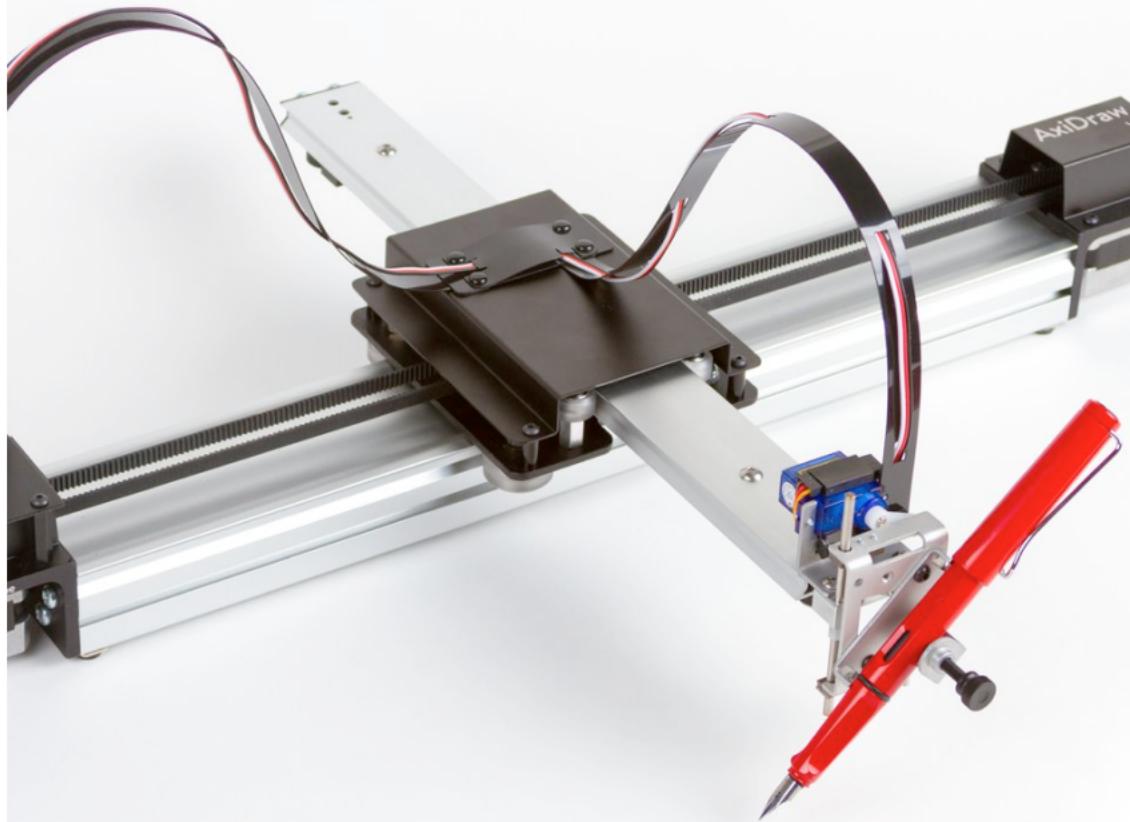
Assignment:

Make a print and present design journal.

Options:

- With the AxiDraw
- With a 3D printer
- With another CNC

**Generative Art and
Parametric Design**

Creative Coding
Conditional Design
Poetic Computation

Code as Creative Medium
A Handbook for Computational Art and Design
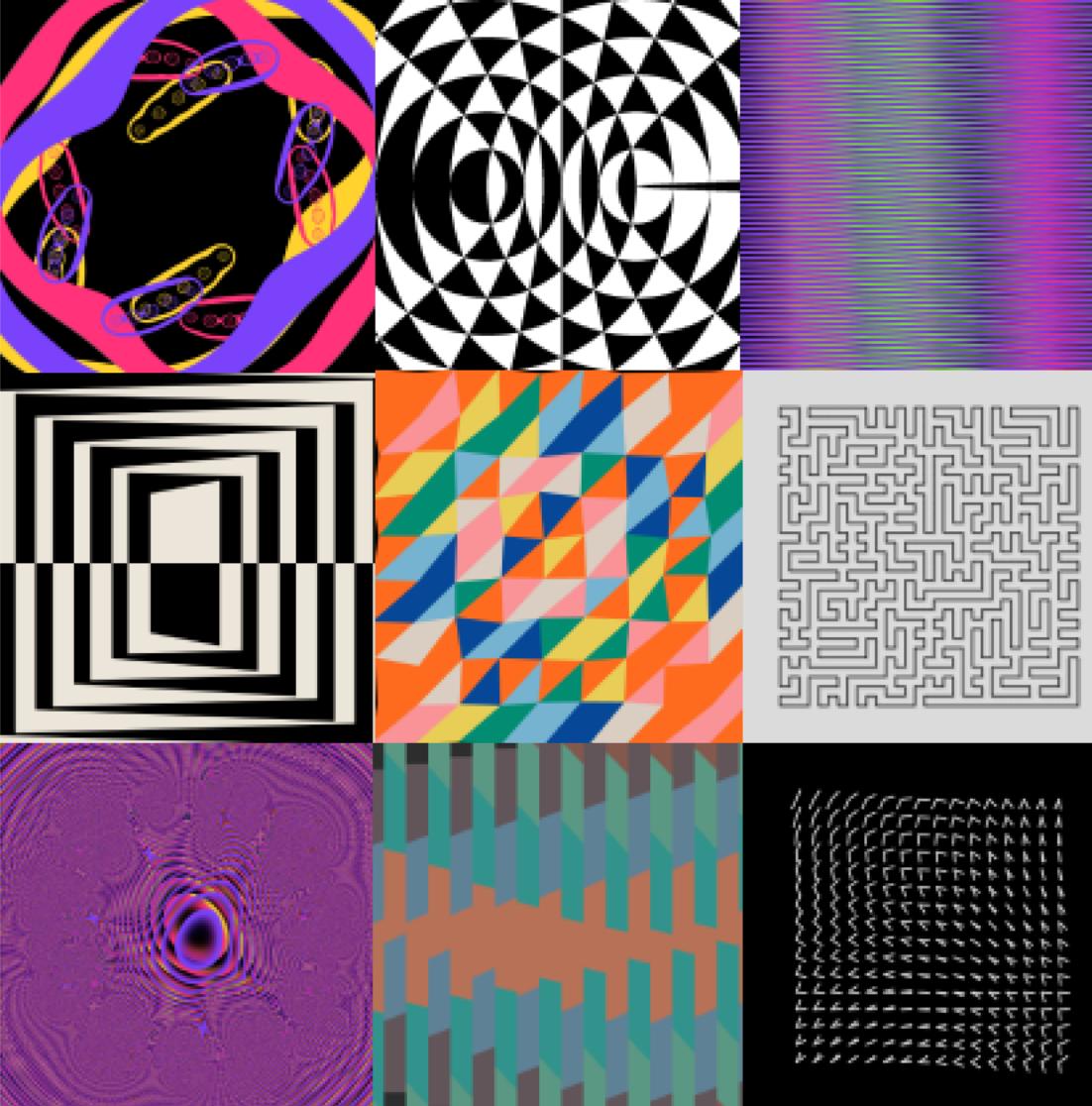
Assignment:

Record a short video and present design journal.

Constraint: Use code to create a visual piece.

Options:

- Make an image that changes every time you see it
- Add sliders to a design
- Recreate an artwork you like

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