DATT 2400

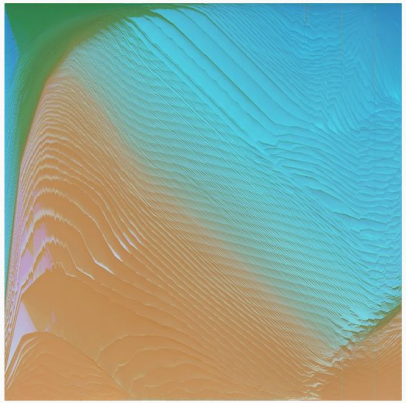
Creative Coding I

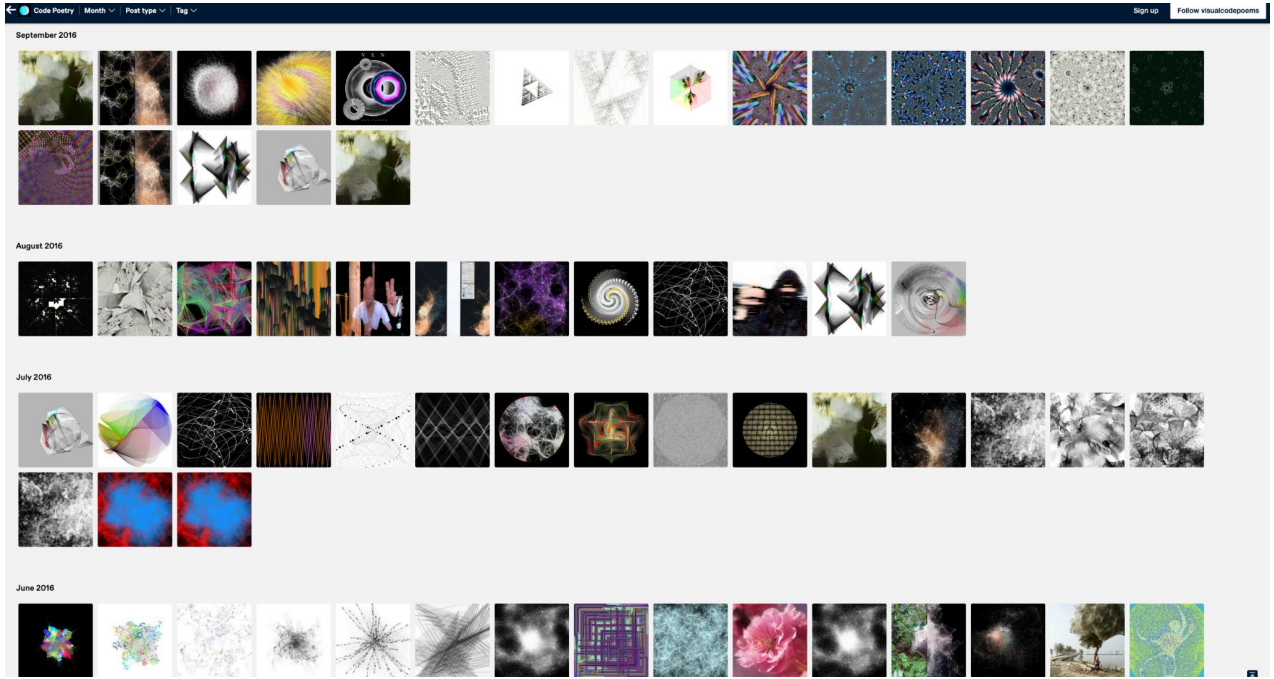
About me

Home Archive

Code Poetry

Code artworks, inspired by zen poetry and haiku. Celebrating the simplicity and beauty that can be found in code.
Updated daily. More work can be found at www.dantappersounddesign.com
Contact: dantappersounddesign@gmail.com





https://visualcodepoems.tumblr.com/

Creative Coding I . DATT 2400

Course Director: Dan Tapper <dantap@yorku.ca>

Course Github repository:
https://github.com/atarilover123/DATT-2400-CreativeCoding-I

Course calendar description

This course introduces students to writing computer code that is the basis for creative projects. As software now pervades all aspects of contemporary culture, artists and designers can significantly expand their creative palettes through knowledge of and experience with coding. By engaging with the computer more directly students explore the potentials of software to create and form systems and environments. In course projects, students will address contemporary aesthetic and conceptual concerns, and develop their works in a current creative coding environment with coding concepts explored transferable to a range of related development environments.

This course will be delivered through a combination of:

Weekly lectures – Showcasing the medium of creative coding and spotlighting techniques, movements and artists in the field.

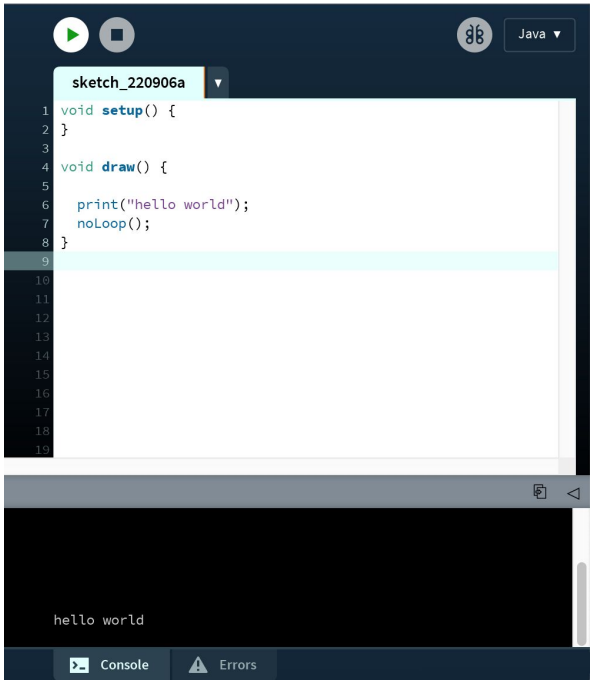
Weekly labs – Putting creative coding techniques into practice through weekly development and experimentation.

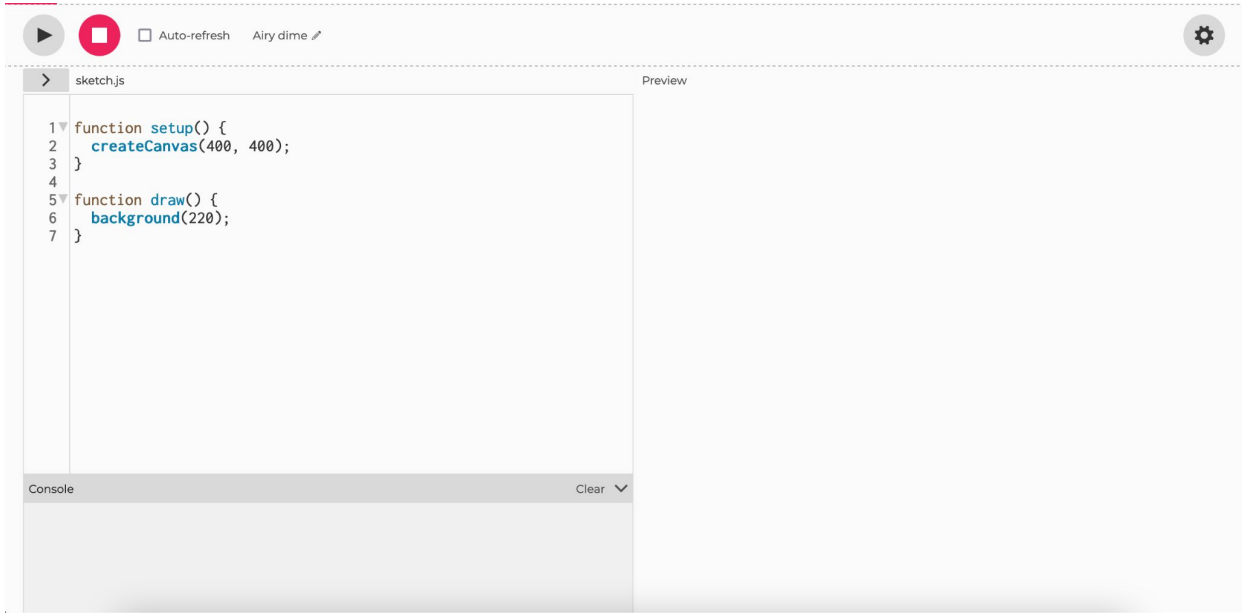
Required tools

The practical element of this course will be taught using the creative coding environments Processing and p5.js.

Processing – https://processing.org/

p5.js – https://p5js.org/





Welcome to Processing!

Processing is a flexible software sketchbook and a language for learning how to code. Since 2001, Processing has promoted software literacy within the visual arts and visual literacy within technology. There are tens of thousands of students, artists, designers, researchers, and hobbyists who use Processing for learning and prototyping.

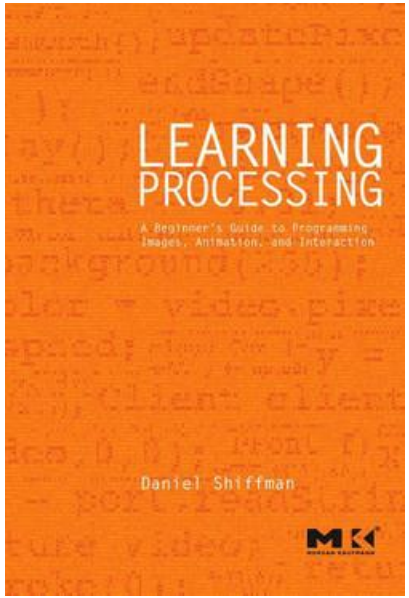
Download | Reference | Donate

Submissions and class resources

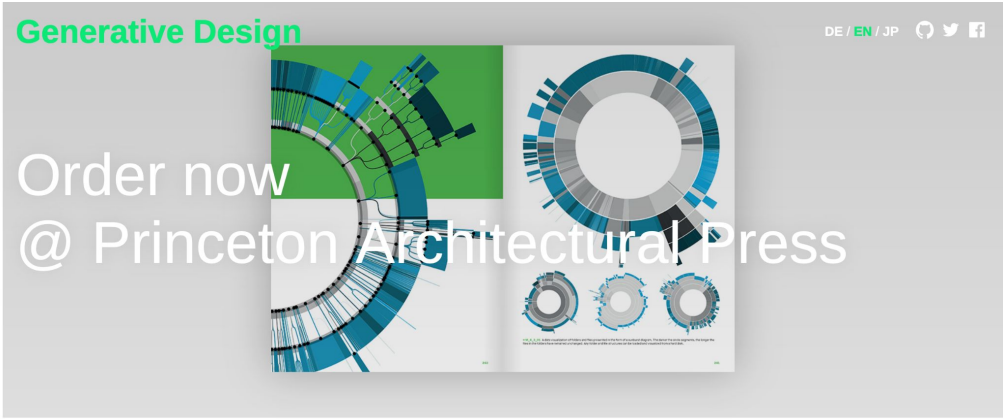
Students will create a Github account to upload weekly sketches and notes. Tests and quizzes will be conducted via Eclass.

Github – https://github.com/

eclass – https://www.yorku.ca/eclass/



[Learning Processing by Daniel Shiffman]



Hello and welcome to Generative Design, Creative Coding on the Web. Here, you will find all of the sketches from the book and their associated code. Run

[Generative Design by Benedikt Groß]

Topics and concepts

Topics include introduction to fundamental coding techniques, utilization of mathematical functions as a practical utility and creative tool, interactivity, animation and web based art. Students will practically apply these concepts in the creation of 3 creative coding projects.

Learning outcomes with examples

At the completion of this course, students will be able to:

- Address contemporary aesthetic and conceptual concerns at an introductory level through creative code-based artwork creation.
- Employ fundamental programming concepts.
- Write code to create systems and environments.
- Apply strategies and techniques for developing creative code based creative projects
- Discuss the range of ways that artists integrate creative coding into their processes.

Module breakdown

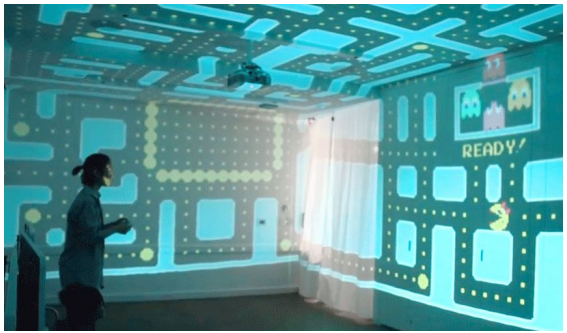
Weeks 1 - 3, Introduction to creative coding and the strategies of generative art

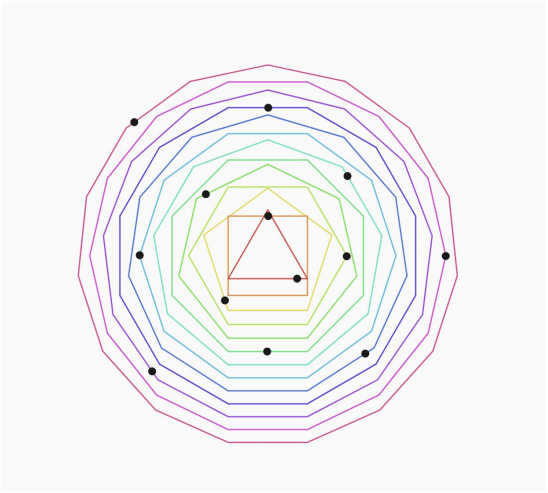
Week 4, Rendering creative coding for digital and physical presentation

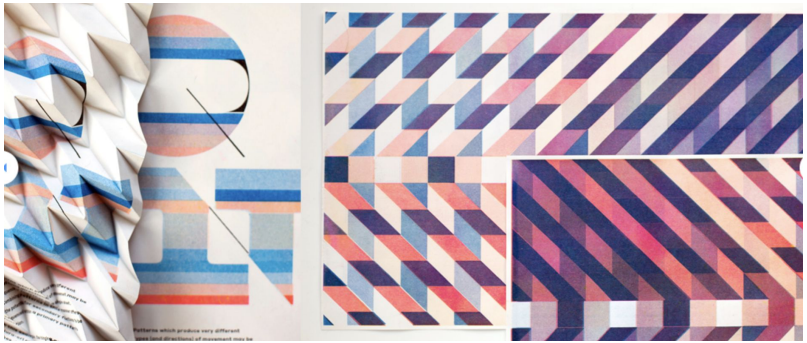
Week 5 - 7, Computational animations

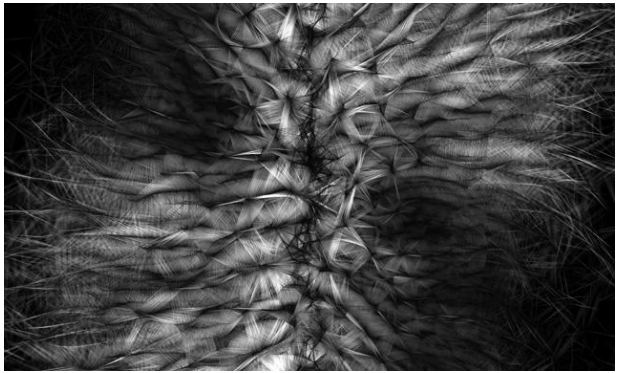
Weeks 8 - 10, Interactivity, rules, sensors and game logic

Weeks 11 -12, Developing final projects









Graded assessment

- Quizzes: 20%
- In class contributions: 10%
- Assignment 1: 20%
- Assignment 2: 20%
- Assignment 3: 30%

Quizzes will focus on code and artistic content from labs and lectures.

In class contributions from participation in class discussions, in class coding tasks and creative experiments.

Assignment 1 create a static piece of generative art, using loops, two-dimensional geometry and simple mathematical functions.

Assignment 2 computationally generated animated project inspired by computational gif artists such as Bees & Bombs.

Assignment 3 the creation of a final project combining generative and interactive techniques to make a screen based art installation or game.

Week 1

Generative art week 1

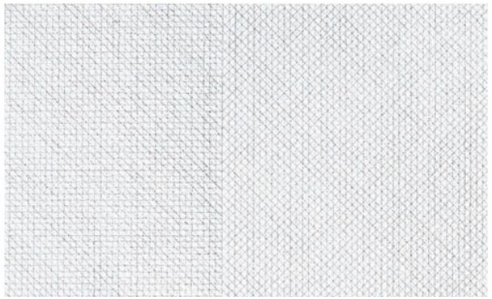
What is generative art?

Algorithm as instruction

Generative art is art made using a predetermined system that often includes an element of chance – is usually applied to computer based art – Tate Modern

The Idea Becomes a Machine that Makes the Art – Sol Lewitt

SOL LEWITT: A WALL DRAWING RETROSPECTIVE

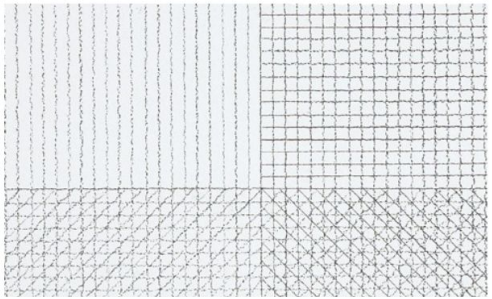


Wall Drawing 47

A wall divided into fifteen equal parts, each with a different line direction, and all combinations. June 1970 Black pen... Read More

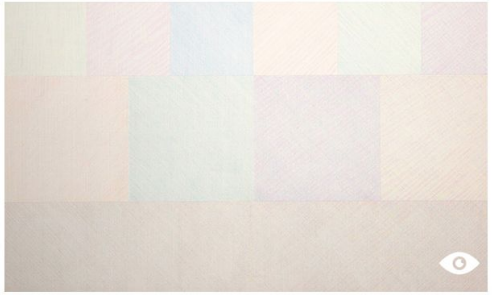
Wall Drawing 51

All architectural points connected by straight lines. June 1970 Blue snap lines LeWitt Collection, Chester, Connecticut ... Read More

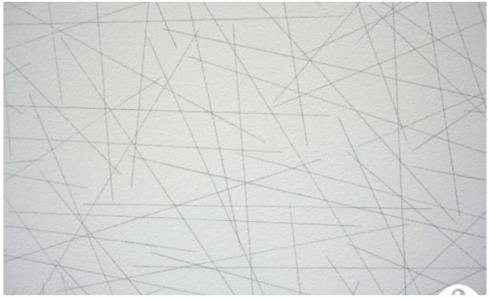


Wall Drawing 56

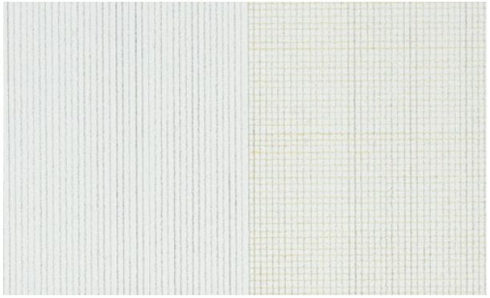
A square is divided horizontally and vertically into four equal parts, each with lines in four directions superimposed p... Read More



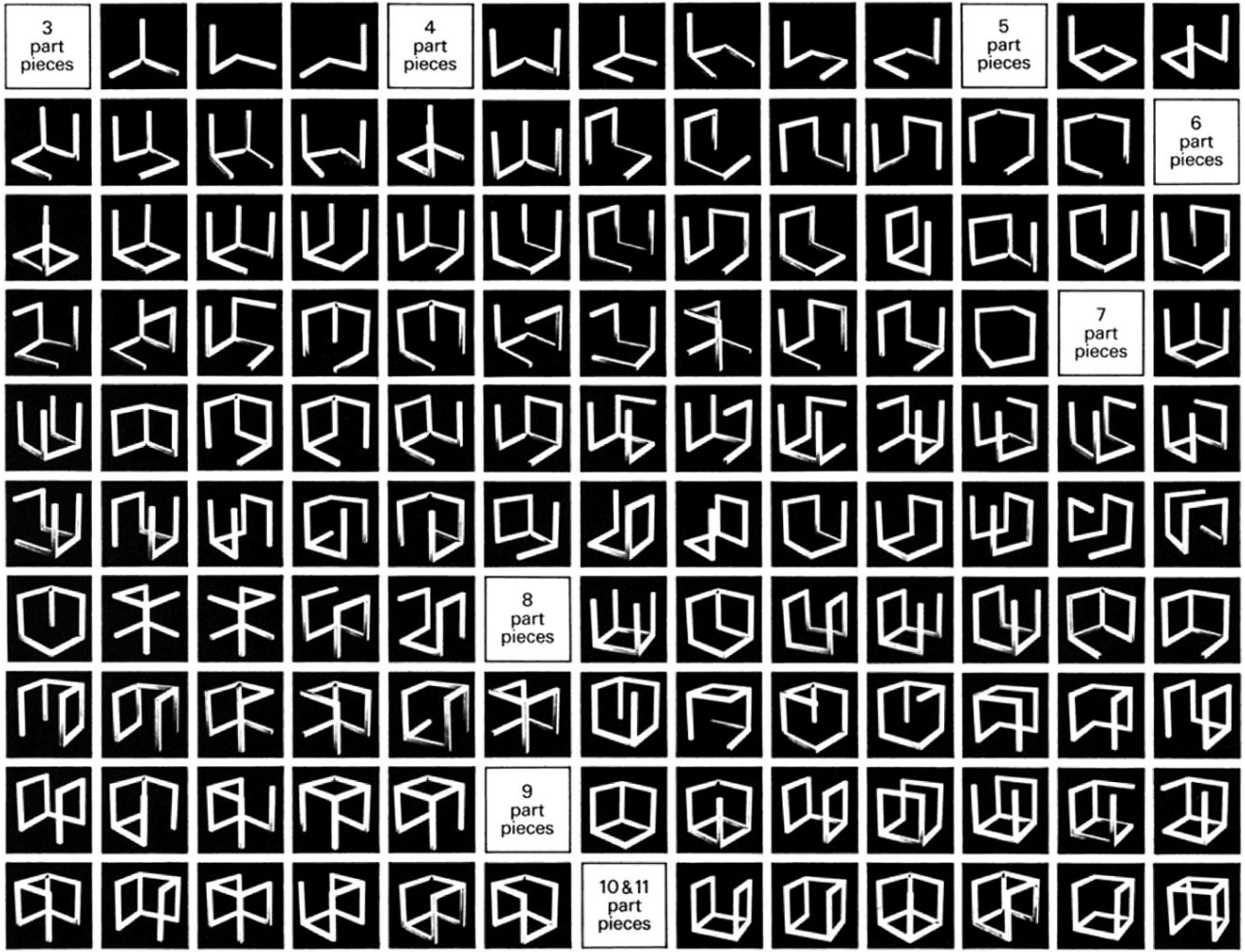
Wall Drawing 85

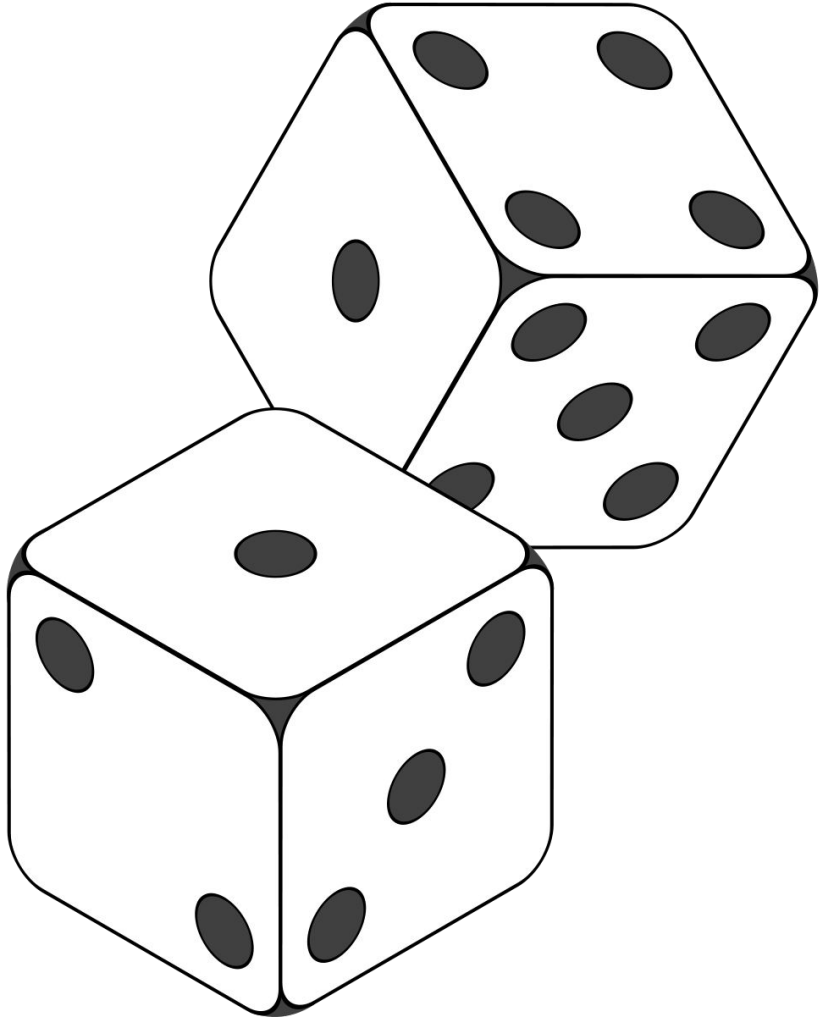


Wall Drawing 86



Wall Drawing 87


3 part pieces
4 part pieces
5 part pieces
6 part pieces
7 part pieces
8 part pieces
9 part pieces
10 & 11 part pieces



1 =
2 =
3 =
4 =
5 =
6 =

Kings (game)

From Wikipedia, the free encyclopedia

For the Japanese party game, see King game. For the Danish film, see King's Game. For the video game company, see King (company).

Kings (also known as **king's cup**, **donut**, **circle of death** or **ring of fire**) is a drinking game that uses playing cards. The player must drink and dispense drinks based on cards drawn. Each card has a rule that is predetermined before the game starts. Often groups establish house rules with their own variation of rules.

Contents [hide]

Equipment [edit]

- 1 Deck of Cards
- 2 or more players
- Alcoholic beverages – typically wine, beer, or mixed drinks - or non alcoholic beverages
- A large cup which will be used as the King's Cup, or (in the "Ring of Fire" version of the game) an unopened beer can

Kings

Cards during a game of Kings

Alternative names	King's cup Donut Circle of death Ring of Fire Four Kings
Type	Drinking
Players	2+
Age range	Varies by legal jurisdiction
Cards	52
Deck	1 deck of standard playing cards
Play	Clockwise or counterclockwise

THE ALGORISTS by Roman Verostko

Jean-Pierre Hébert

Chicago, 1992,
sienna natural and
cobalt blue;
pen and inks on
technical paper.

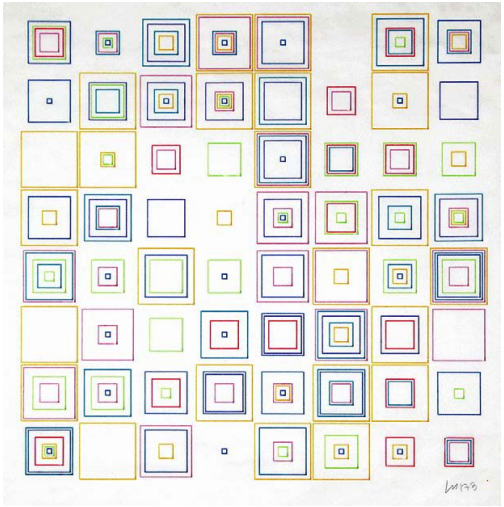
© j.p.hebert

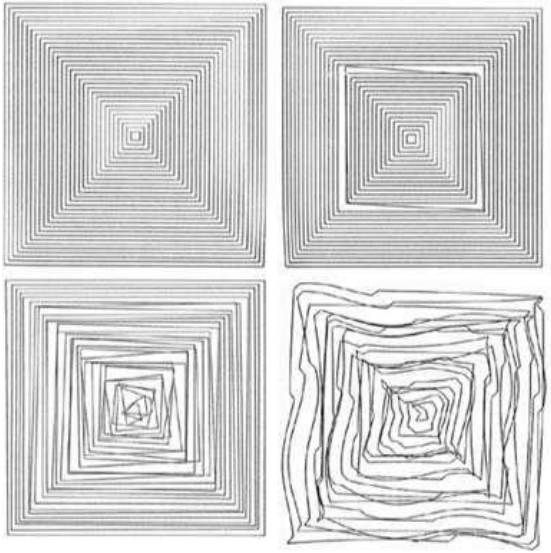
Often I am asked "Who are the algorists?" Simply put an algorist is anyone who works with algorithms. Historically we have viewed algorists as mathematicians. But it also applies to artists who create art using algorithmic procedures that include their own algorithms. This page presents an account of the adaptation of this term by a group of artists in 1995. Algorithmic art has a deep history that reaches back to prehistoric art. But the advent of computing power spawned an artistic practice with form-generating features that is relatively unique to the last quarter of the 20th Century. Computer power gives the artist's algorithms a leverage we might liken to the power of the engine in the industrial revolution. In 1969, when I first tasted algorithmic leverage, I set out to learn how to use it as an artist.

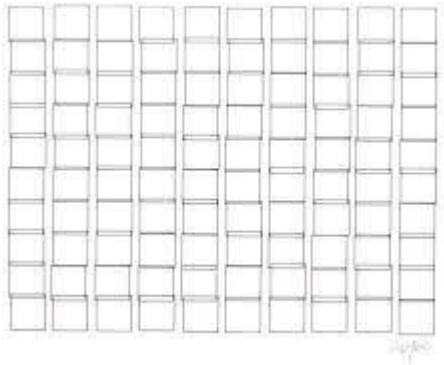
veramolnar.com

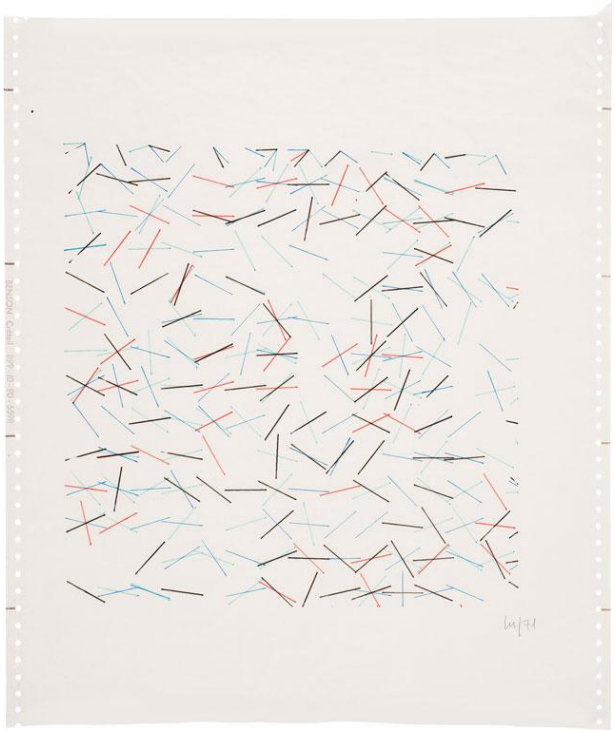
Vera Molnár is a Hungarian media artist living and working in France. Molnar is widely considered to be a pioneer of computer art and generative art, and is also one of the first women to use computers in her art practice. Born in Hungary, she studied aesthetics and art history at the Budapest College of Fine Arts. Wikipedia

Born: January 5, 1924 (age 98 years), Budapest, Hungary



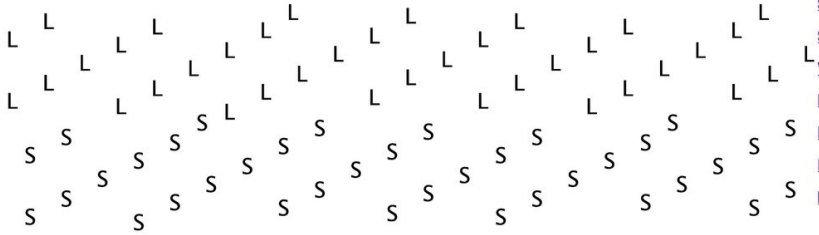


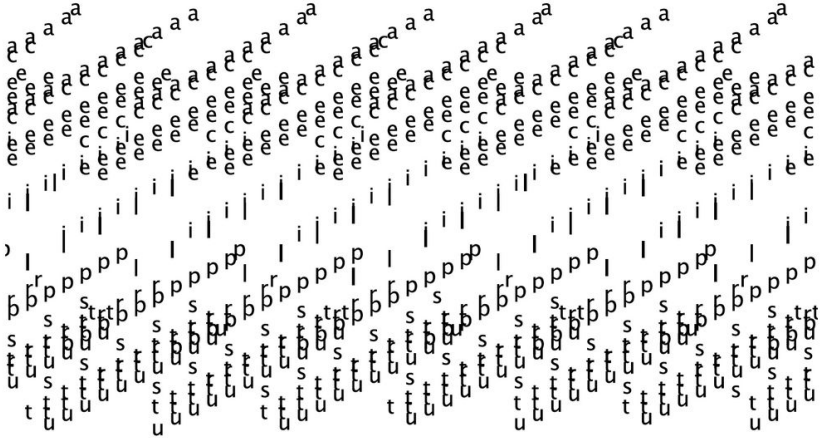


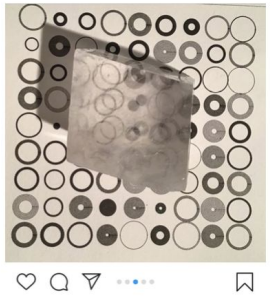


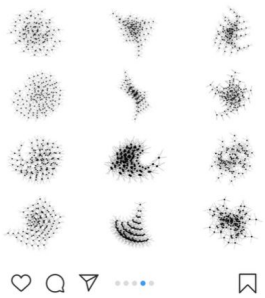
SuperLattice

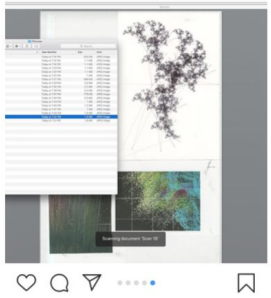
A visual guide to the components of SuperLattice as a theoretical exhibition











Lab

In today's lab we will be starting with simple games where we create rules and how these rules can be applied to grid like structures. We will ask questions such as:

- How can we make a simple and highly defined structure more interesting?
- How far can we deconstruct a grid structure before it stops resembling a grid?

We will then introduce ourselves to the Processing environment and begin to program these rules ourselves to create our first unique piece of generative art.

This Processing overview is a handy learning companion

Break

Before we go on break let’s all download the latest version of Processing.

While Processing download we will have a short break before starting lab at 10.50

Exercise: Rule creation

https://docs.google.com/presentation/d/1o7b9QG-XzNL7VFHabcqQO22-b46SOmWWGwRIE4s9KJ4/edit?usp=sharing

Processing overview

https://docs.google.com/presentation/d/1o7b9QG-XzNL7VFHabcqQO22-b46SOmWWGwRIE4s9KJ4/edit?usp=sharing

Homework

Create a github account

Github – https://github.com/