



1



2



3



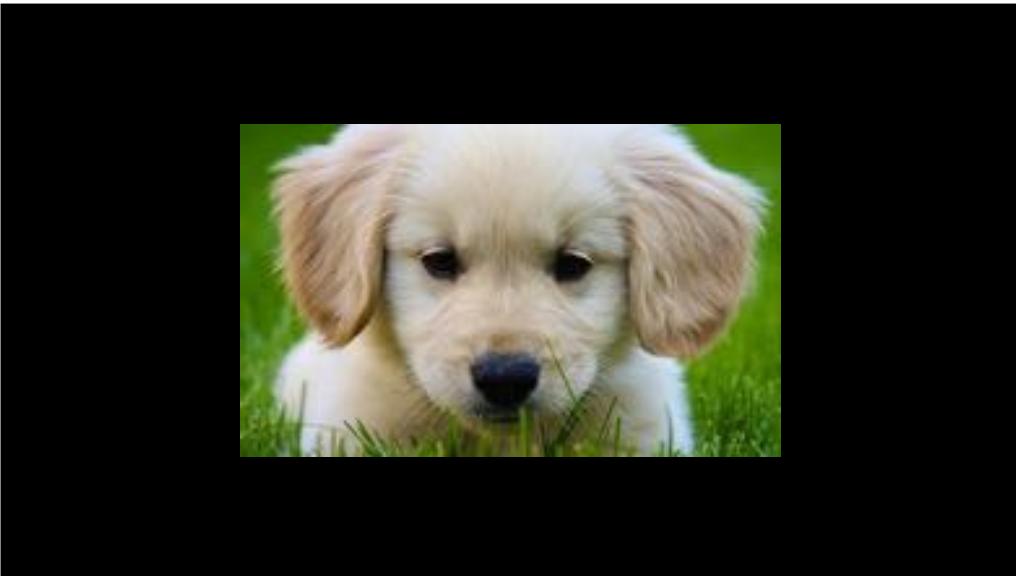
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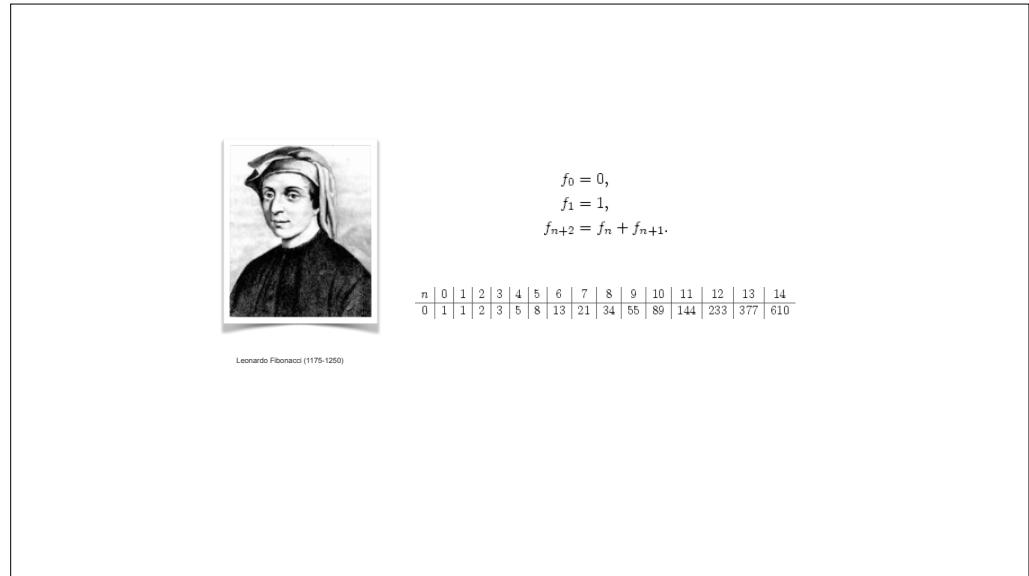
5



6



7



8

podaj ile liczb wypisać:

9

podaj ile liczb wypisać: 4

10

podaj ile liczb wypisać: 4

- 1
- 1
- 2
- 3

11



12

```
int sx, sy;
float density = 0.5;
int[][][] world;

void setup()
{
    size(640, 360);
    frameRate(12);
    sx = width;
    sy = height;
    world = new int[sx][sy][2];
}

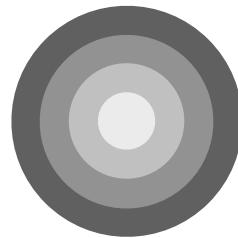
void draw()
{
    background(0);
```



RZEŽBIENIE W KODZIE

13

14



15



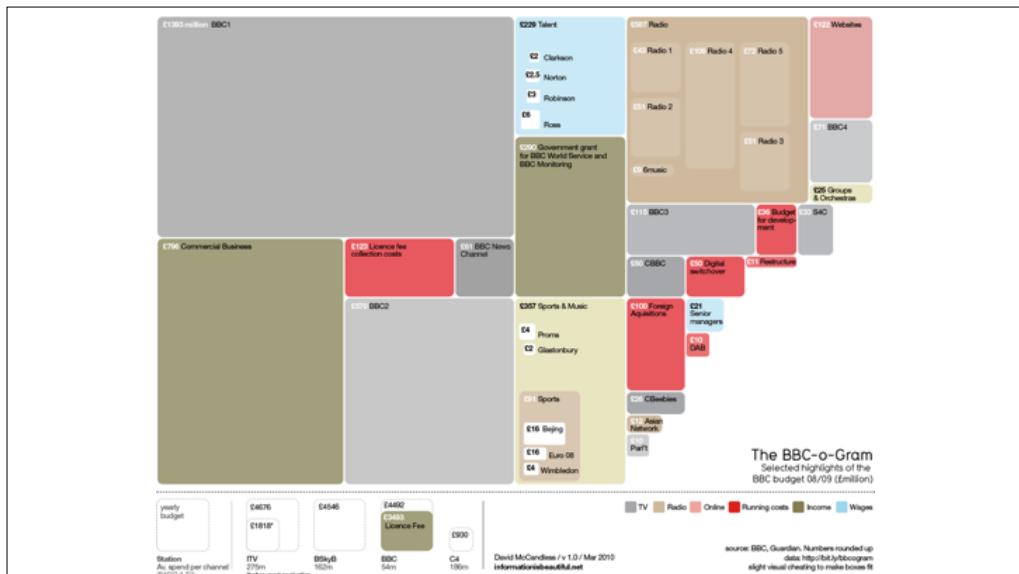
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DATA VISUALIZATION

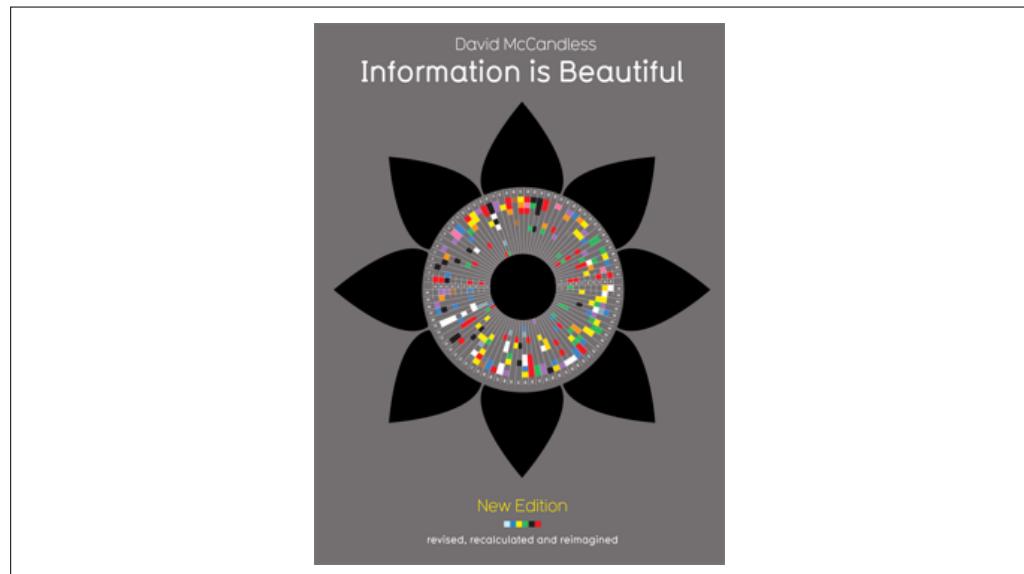
17

	A	B	C	D	E	F
1	label	label	description	source_name	source_url	source_type
2	amount	text	long description	source_name	source_url	source_type
3	950	Global pharma market	Global drugs market:	Forbes	http://www.forbes.com/sites/aleksandravereher/2012/07/26/the-global-drug-market-will-grow-to-950-billion-by-2015/	article
4	901	UBI profit deficit	2013	BBC News	http://www.bbc.co.uk/news/business/17516744	article
5	89.8	China	China defence, 2011	iGSS	http://www.igss.org/publications/militarybalance/the-military-budget-2012-china-state	article
6	740	Tobacco	Global tobacco industry revenue, 2011	Bloomberg	http://www.bloomberg.com/research/stocks/moreinfo/industry/2012/05/06/tobacco-revenue-while-it-isnt-u.html	article
7	738.3	US	US defence, 2011	iGSS	http://www.igss.org/publications/militarybalance/the-military-budget-2012-china-state	article
8	73	Carlos Slim Helu	Carlos Slim Helu, richest man in the world, net worth, 2013	Forbes	http://www.forbes.com/profiles/charles-slim-silva-2	article
9	672	Hedge funds market	Global Hedge, 2009	Morgan, Global Finance PhD (2009)	http://moneysigraffine.com/the-economics-of-the-global-hedge-fund-industry/	article
10	67	Bill Gates	Bill Gates net worth, 2013	Forbes	http://www.forbes.com/profile/bill-gates	article
11	67	Video games	Global Revenue, 2012	Forbes	http://www.forbes.com/sites/johnulrich/2011/07/19/video-game-revenue-forecast-global/	article
12	650	Eurozone rescue fund	Global currency spending on movies, 2012	BBC News	http://www.bbc.co.uk/news/business/19886888	article
13	64	Movies	IP & TV News	IP & TV News	http://www.ip-tv-news.com/2013/01/08/global-consumer-spending-on-movies-up-in-alternative-medical-care-market/	article
14	60	All Melbourn	Alternative Medicine Global market, 2011	The Economist	http://www.economist.com/node/18712495	article
15	5709	Global healthcare budget	Taxic Tax Havens	Jackson Hole Research	http://jacksonholeresearch.com/Cost_of_Tax_Axes_Tax_Reform_2011_Nov_2011.pdf	article
16	557.1	Afghanistan cost for US	Guardian catalog	http://www.guardian.co.uk/afghanistan/2013/nov/14/afghanistan-costs-us-valued	article	
17	55	Predicted cost 2003	Iraq War, predicted cost,2003	NY Times	http://www.nytimes.com/2003/07/23/us/iraq-war-predicted-costs.html?pagewanted=1&src=pm	article
18	52.5	Beer	Globe, by 2015	Report Under	http://www.reportunder.com/2013/06/02/globe-2015-report-under/	article
19	5152	UN budget	UN Budget, 2012-13	UN	http://un.unbudget.org/2012-13/un-budget.html	article
20	500	Apple	Apple market capitalisation, 2012	Financial Times Global 500 Dec 2012	http://www.ft.com/intl/cms/s/0/3e388569-11a2-11e2-9014-00144feabdc0.html	article
21	495	Fast food restaurants	Global fast food restaurant revenues, 2012	IBIS World	http://www.ibisworld.com/research/global-fast-food-restaurant-revenues.html	article
22	4905	Developing countries foreign debt	World Bank	http://www.worldbank.org/en/research/2012/07/10/developing-world-debt	article	
23	486	US space programme (1959-2015)	US space programmes, 1959-2015	The Space Review	http://www.thespacereview.com/article3273.html	article
24	484	Medicare	US federal medicare budget, 2012	Washington Post	http://www.washingtonpost.com/business/healthcare/2012/07/17/the-state-of-medicare-and-how-it-can-be-fixed/_php?sid=1&utm_term=.5a23a2a2a2	article
25	419	Gambling	Global gambling revenues, 2011	Global Betting & Gaming Consultancy	http://www.gbgc.com/2012/03/2012-global-gambling-revenues-passed-us-400-billion/	article
26	410	Cannabis	Global revenue	Morgan, Global Finance PhD (2009)	http://moneysigraffine.com/the-economics-of-the-global-cannabis-industry/	article
27	41.73	Apple profit	Apple profit, 2012	Market Watch	http://www.marketwatch.com/investing/stocks/Apple/Apple-revenue-profits-2012	article
28	400	Prostitution	Global revenue, 2009	Morgan, Global Finance PhD (2009)	http://moneysigraffine.com/the-economics-of-the-global-prostitution-industry/	article
29	364.66	Worldwide TV industry	Global revenue, 2009	State	http://www.state.gov/jreleases/News_World_Media_Report_364.htm	article
30	3500	To end extreme poverty within 20 years	Total cost to end extreme poverty within 20 years	The End Poverty, Jeffrey Sach	http://www.endpoverty.org/our-vision/what-we-do/poverty-must-end-cost-to-end-extreme-poverty-within-20-years	article

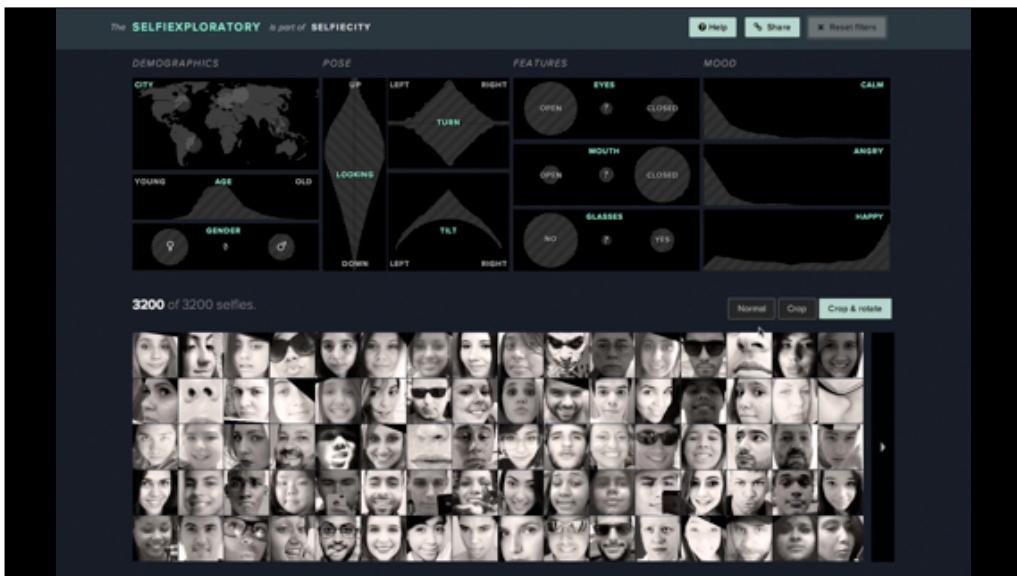
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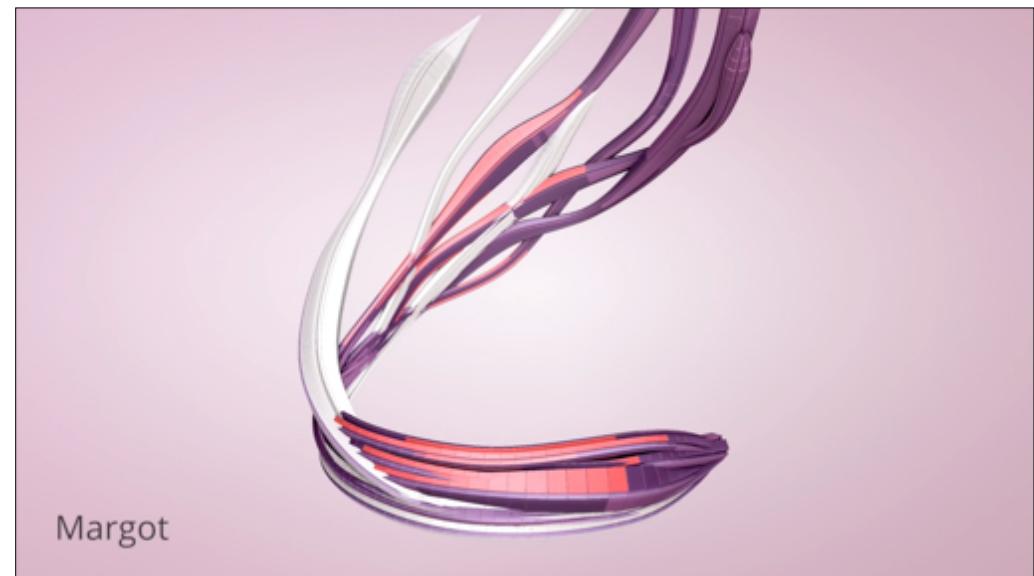
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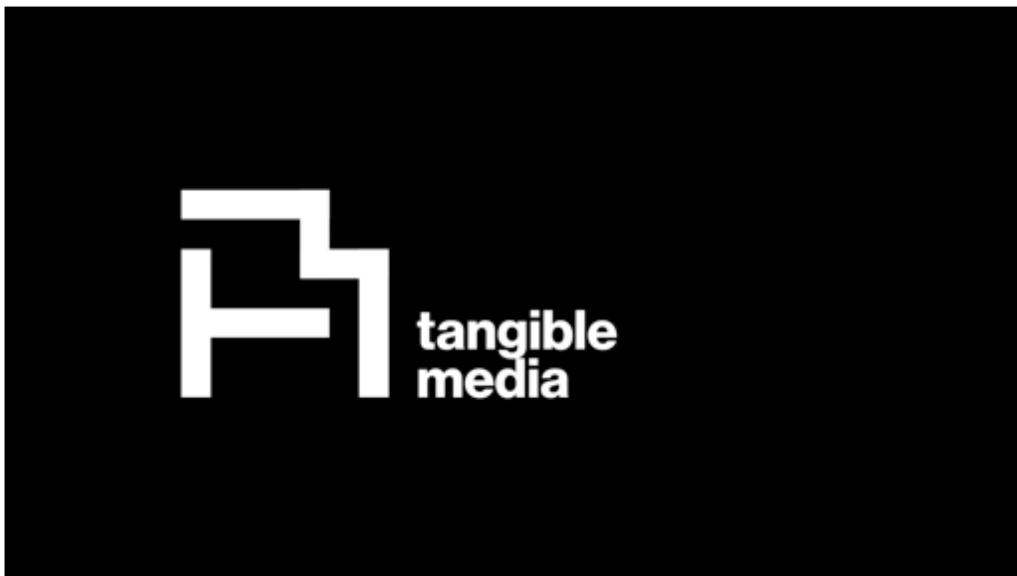
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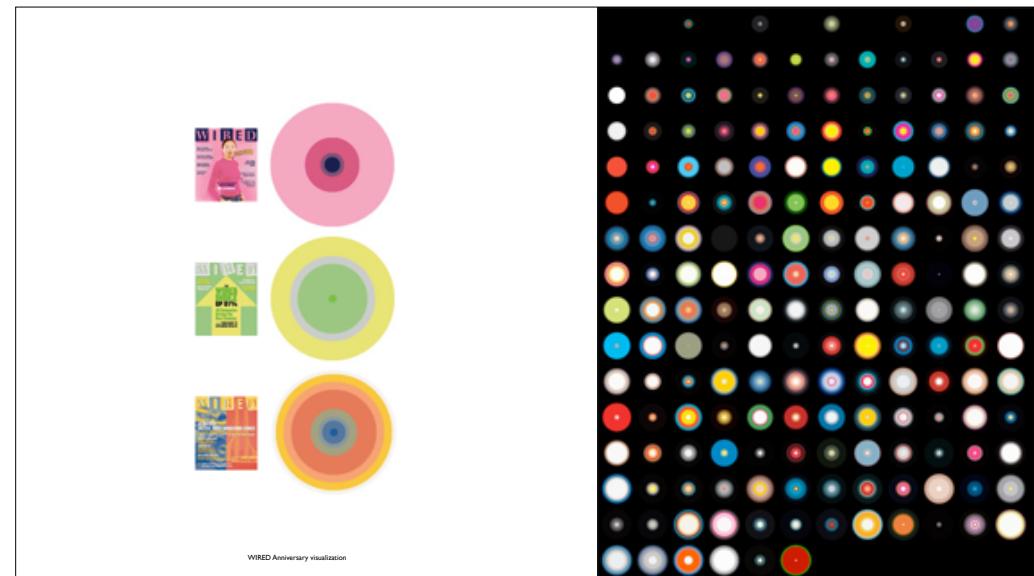
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22



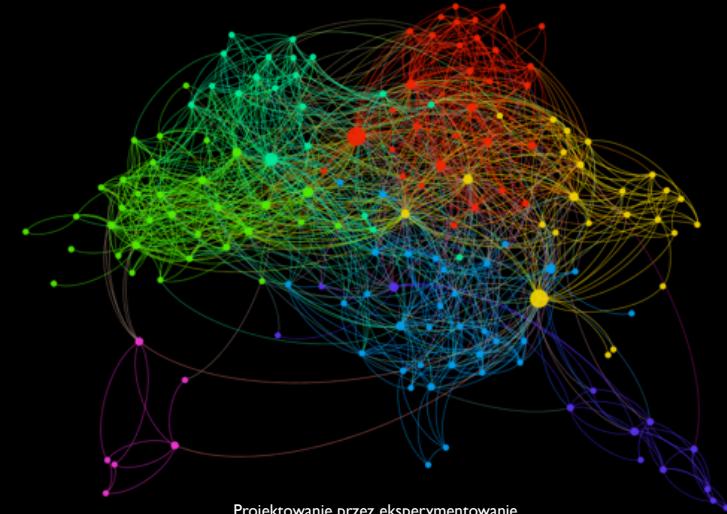
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24



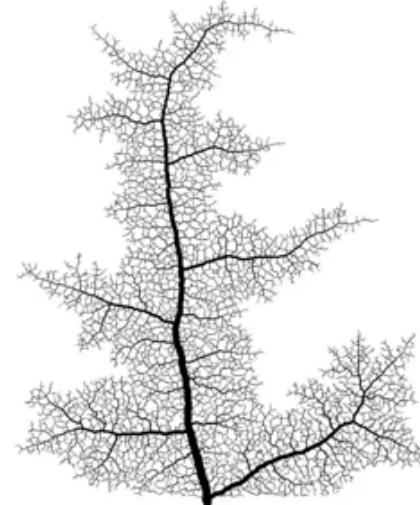
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26

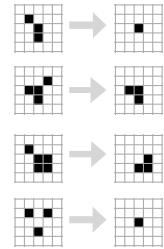
GENERATYWNE

27



28

Conway's Game of Life



1. Any live cell with fewer than two live neighbours dies, as if caused by under-population.
2. Any live cell with two or three live neighbours lives on to the next generation.
3. Any live cell with more than three live neighbours dies, as if by overcrowding.
4. Any dead cell with exactly three live neighbours becomes a live cell, as if by reproduction.

29



nieprzewidywalność

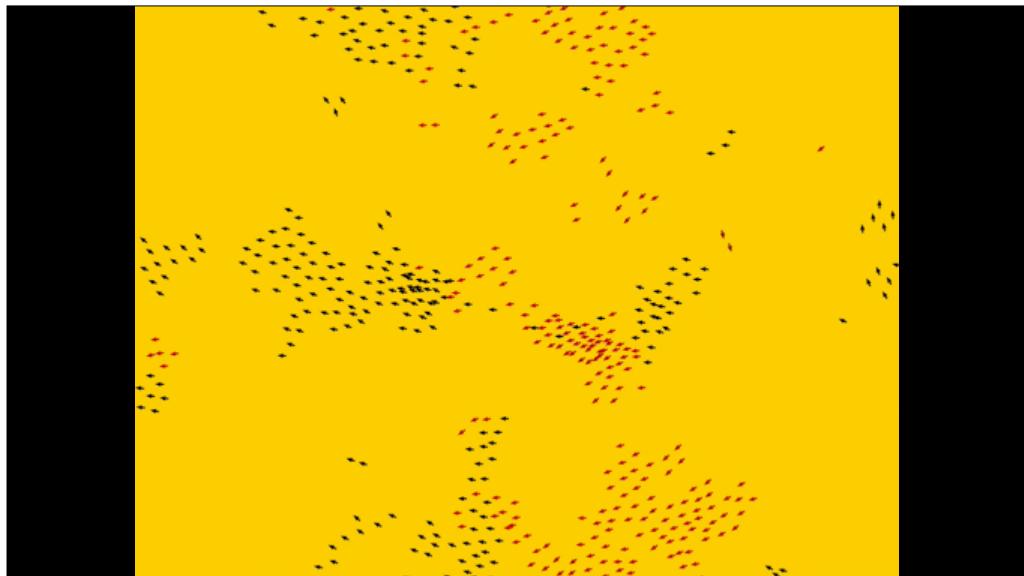
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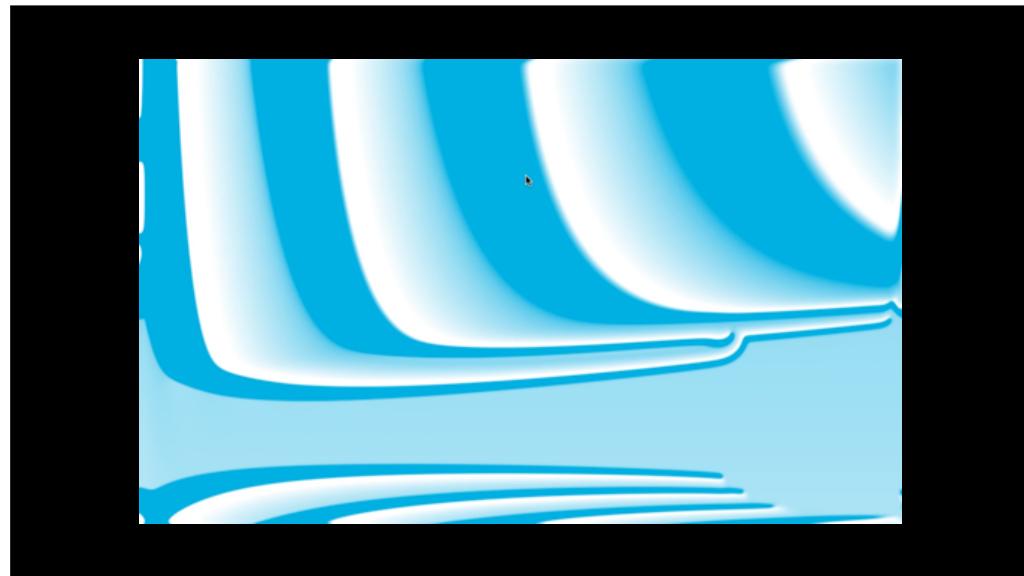
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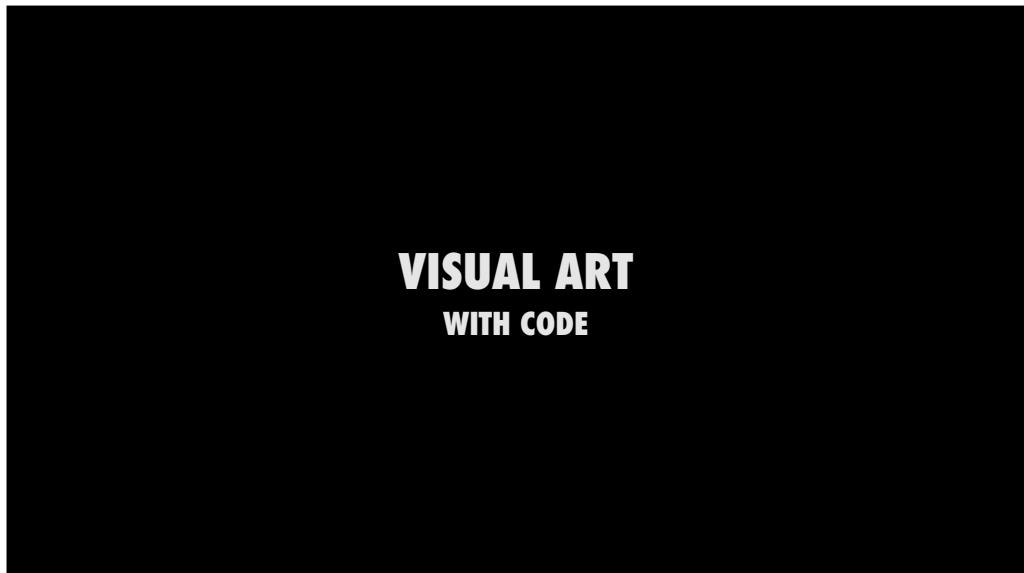
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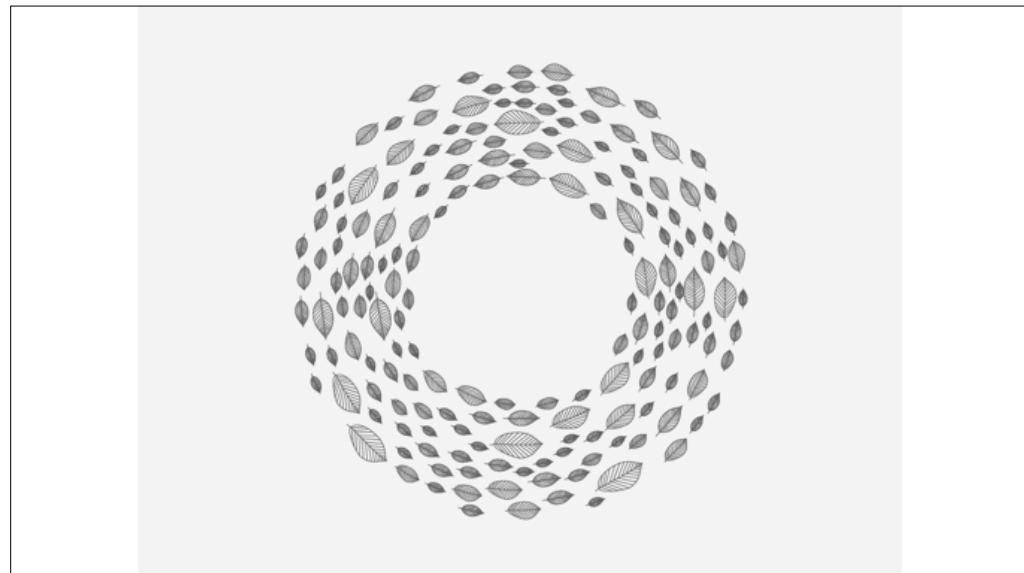
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36



37

BLENDING BITS & ATOMS

CONNECTING DIGITAL & PHYSICAL WORLD

38



39



40



41



42



43



44



45



46



47



<https://vimeo.com/37554411>

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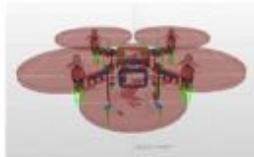
49

<https://vimeo.com/37554411>

INFINITE COMPUTING DESIGN THROUGH EXPLORATION

DREAMCATCHER

Define



Generate



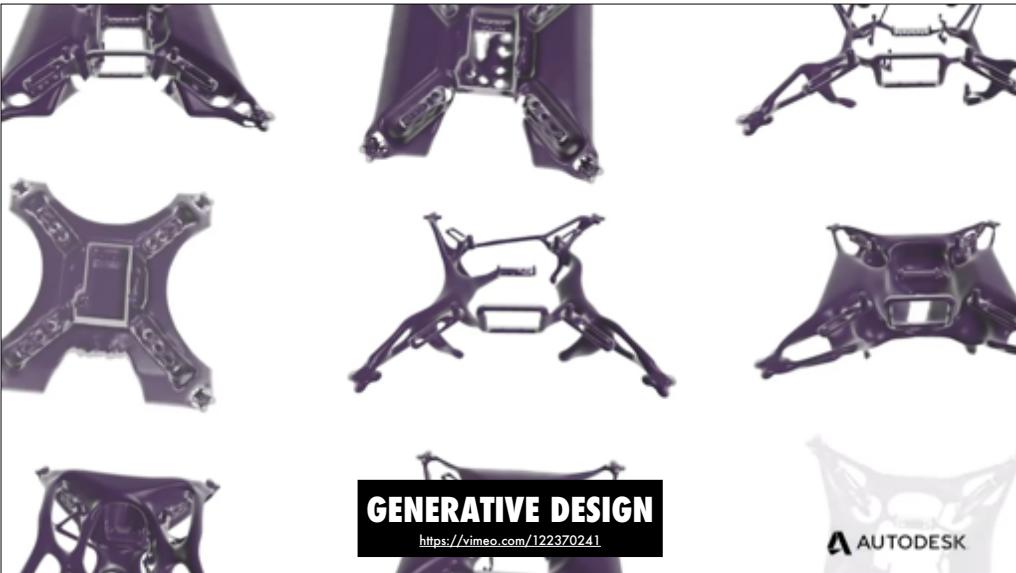
Explore



Fabricate



50



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GENERATIVE DESIGN

<https://vimeo.com/122370241>

AUTODESK

ART + AI NEW FORMS OF EXPRESSION

52



53

CODING & BUSINESS

54



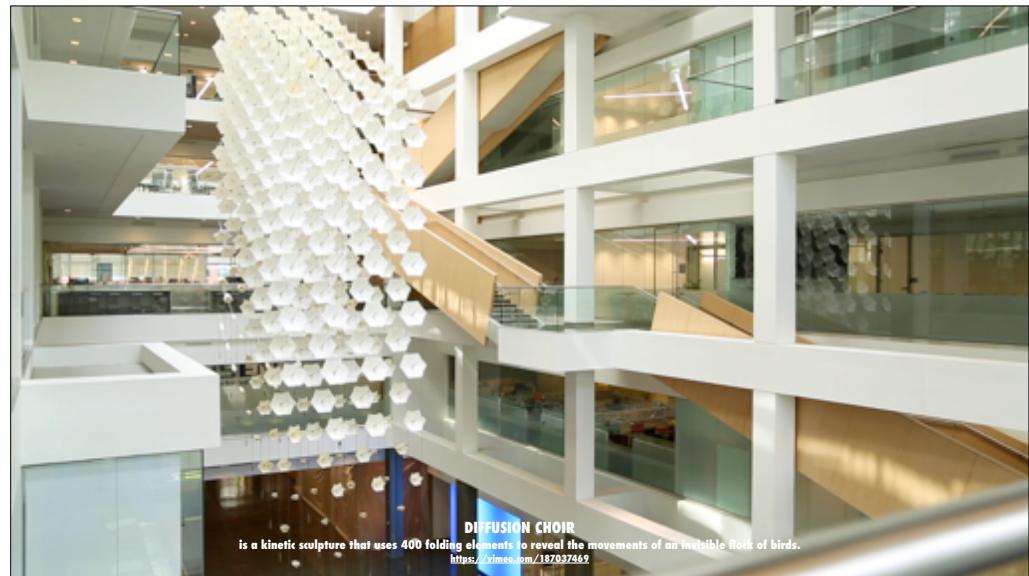
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58



59



60



THE PENIS WALL. A KINETIC SCULPTURE THAT VISUALIZES FLUCTUATIONS IN THE STOCK MARKET.
PEIQI SU, ITP Tech School of the Arts
<http://peiqi.su/art/portfolio-penis-wall.html>

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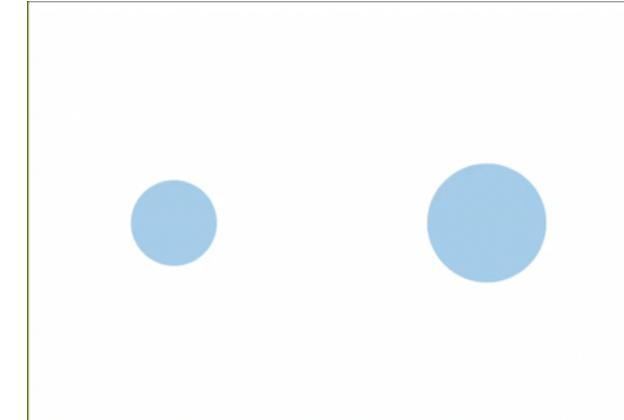


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<http://report.physics.wisc.edu/chapt/2logmaps.htm>

63

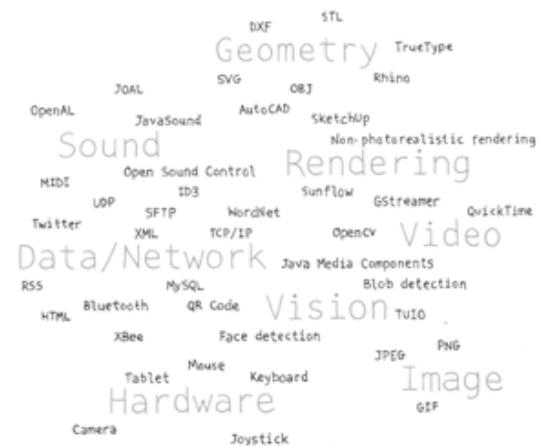


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THE CODE

65



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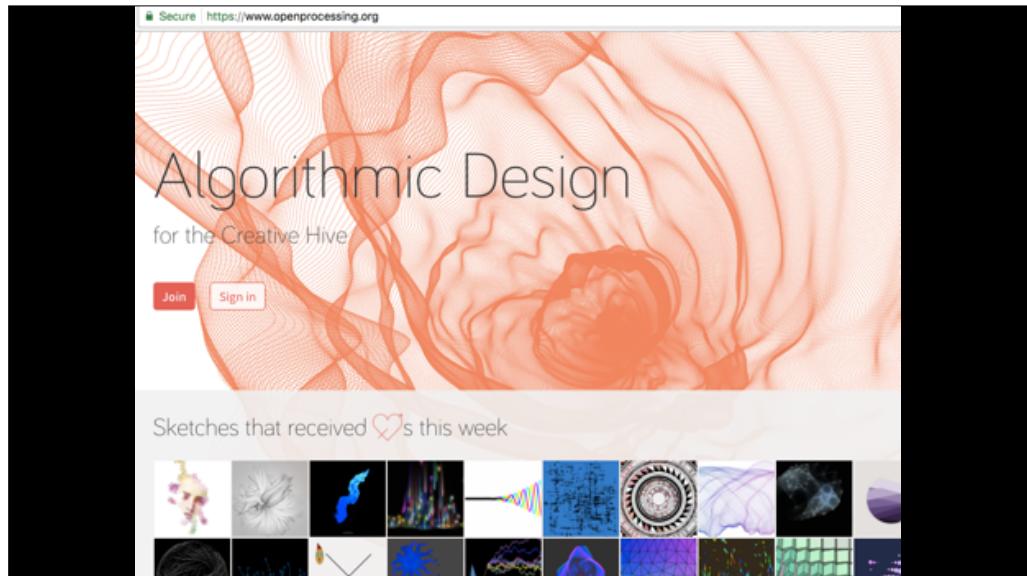


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<http://hello.processing.org/>

69



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