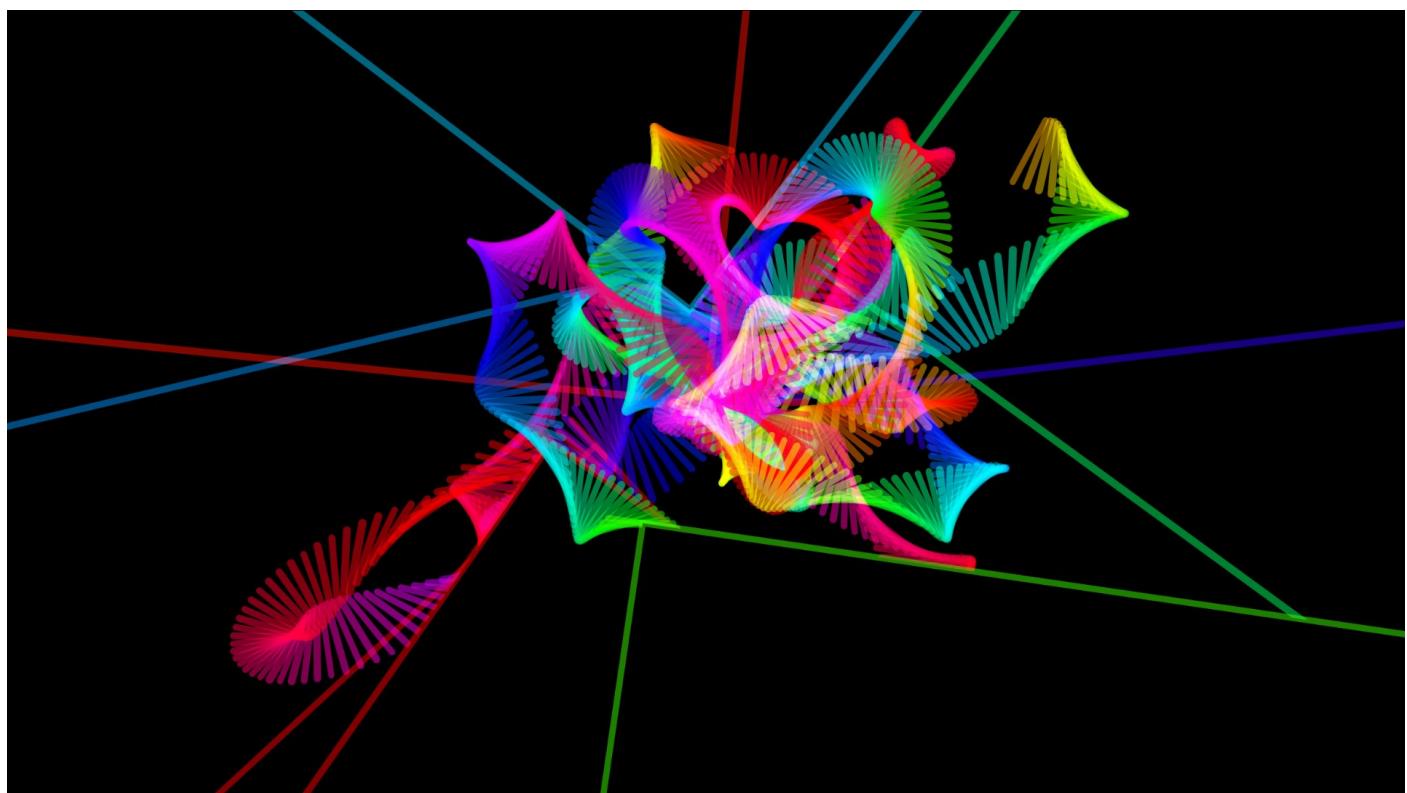
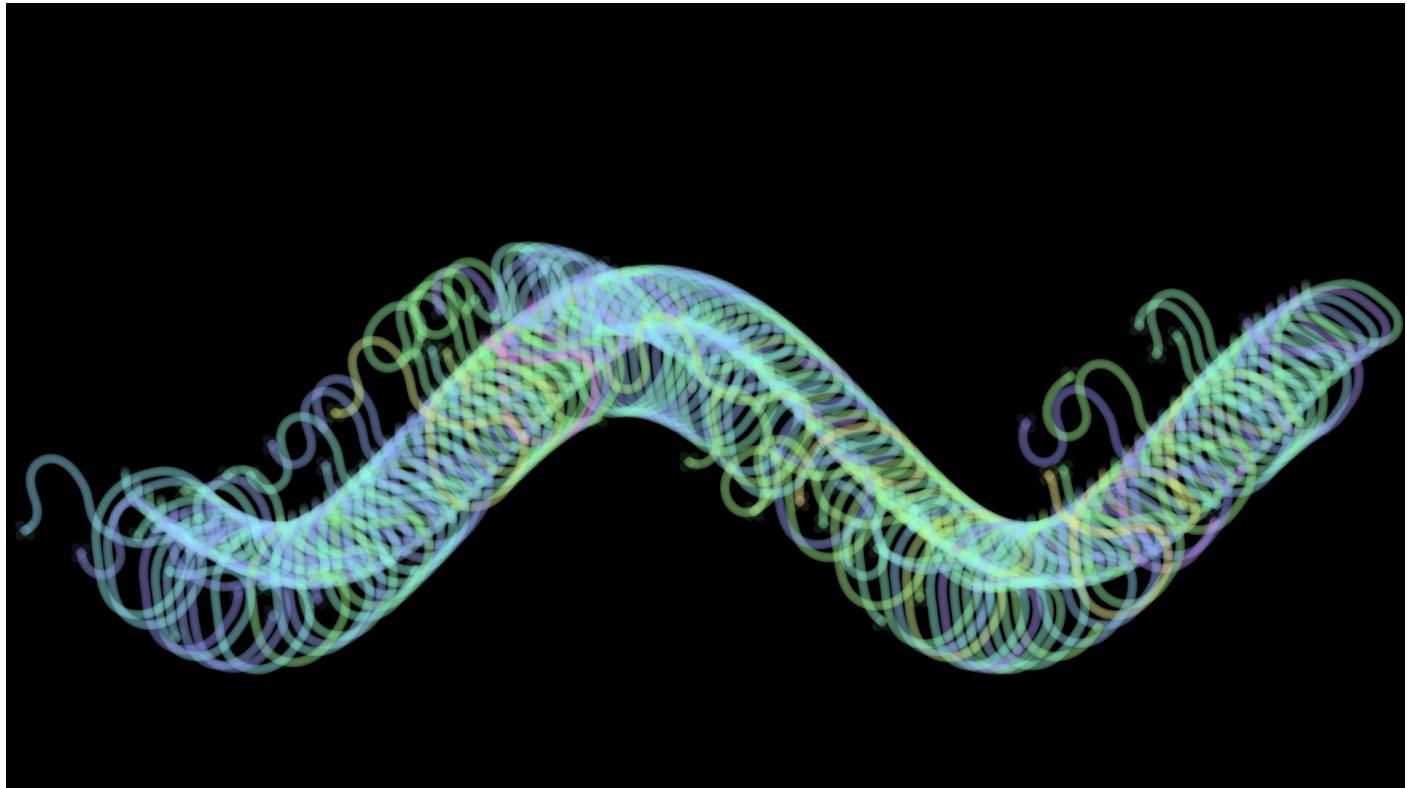
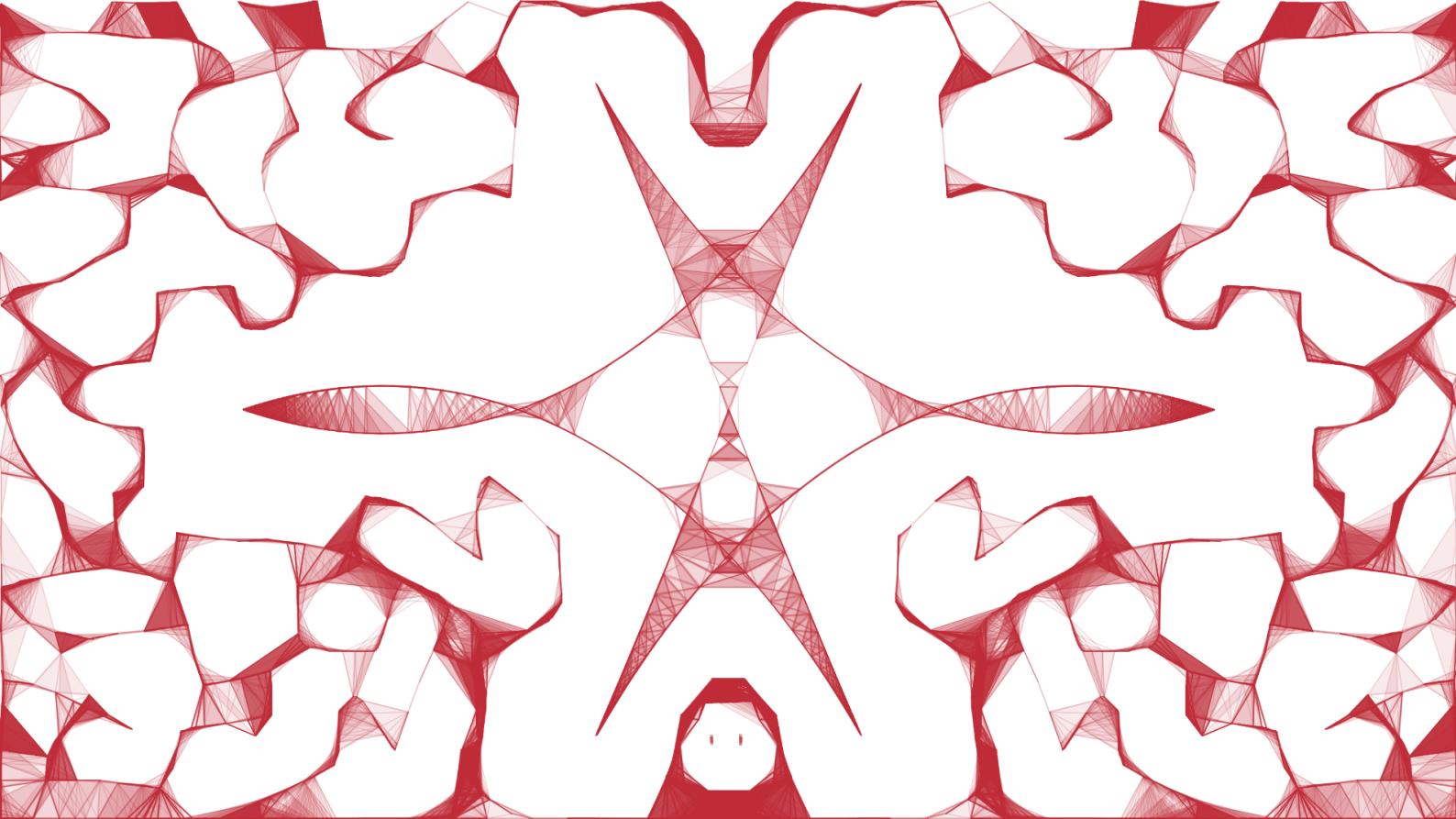


**James Hancock**

# Digital Portfolio





# Index

- ◆ Generative Art Projects: Pages 3—16
- ◆ Competition Projects: Pages 17—20
- ◆ YouTube Videos: Page 21

# Introduction

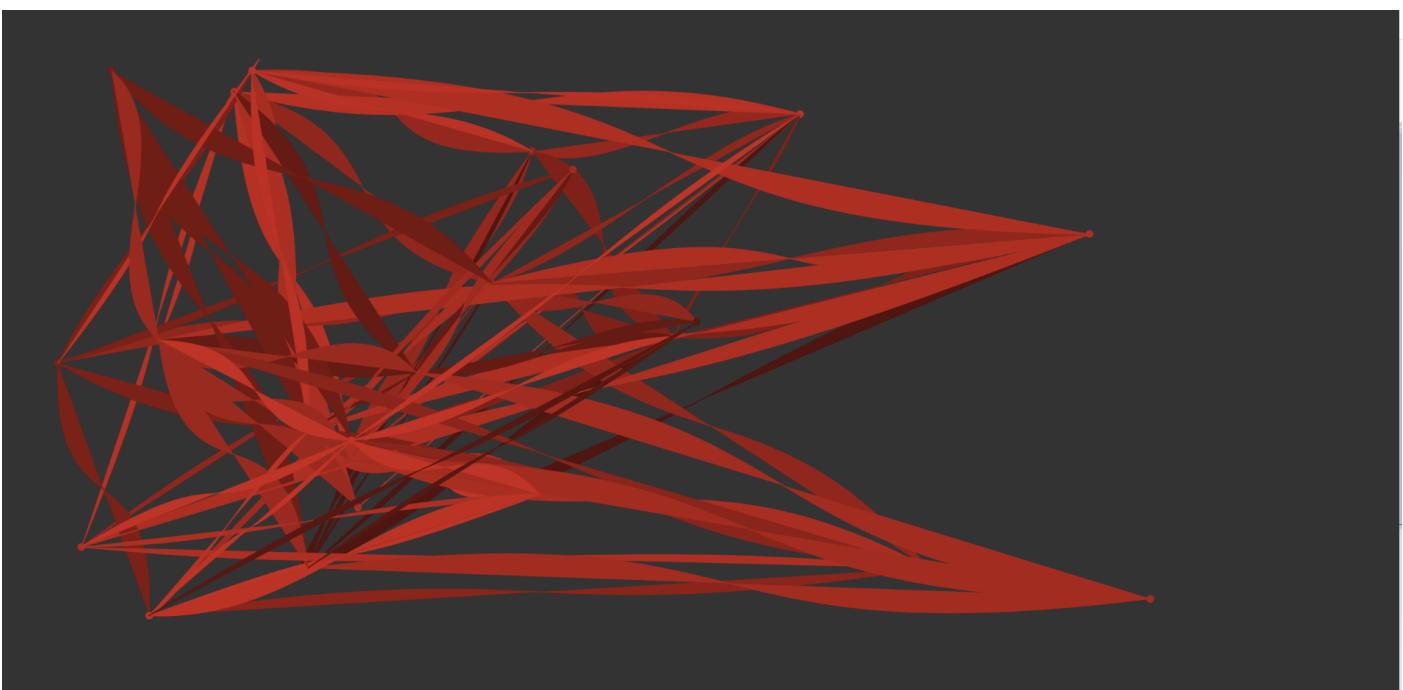
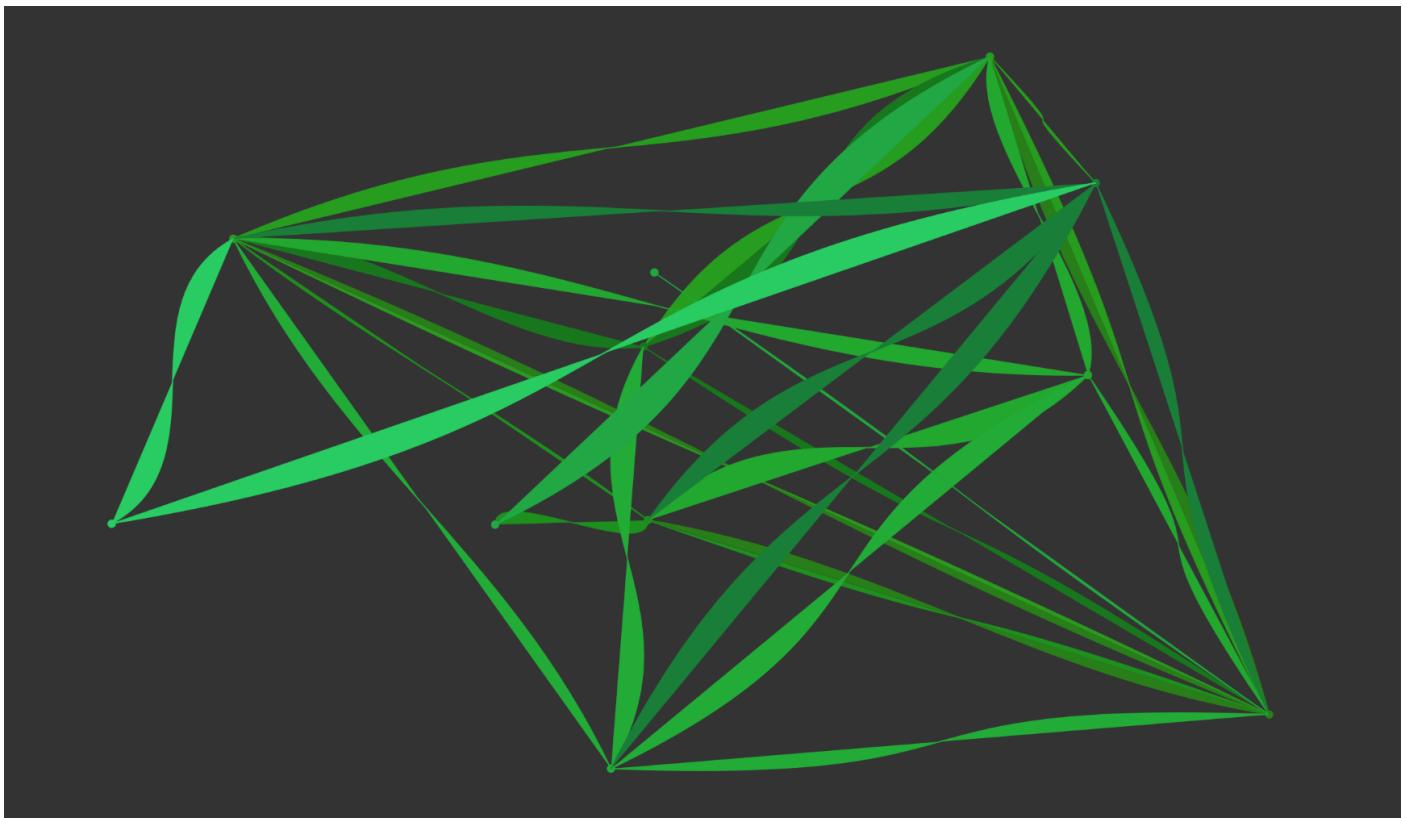
All the generative art projects are animated or interactive, to see their full effect please click on the website links provided. They often display best when shown in full-screen on a HD monitor.

To see the code behind any given project, click on 'Change View' then 'Editor View'. More projects can be seen [on CodePen](#) or [on GitHub](#).

# Interconnected

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[Click here to see it in action.](#)



The nodes of these meshes pull and push each other. The whole mesh reacts as you move your mouse, click anywhere to add more nodes.

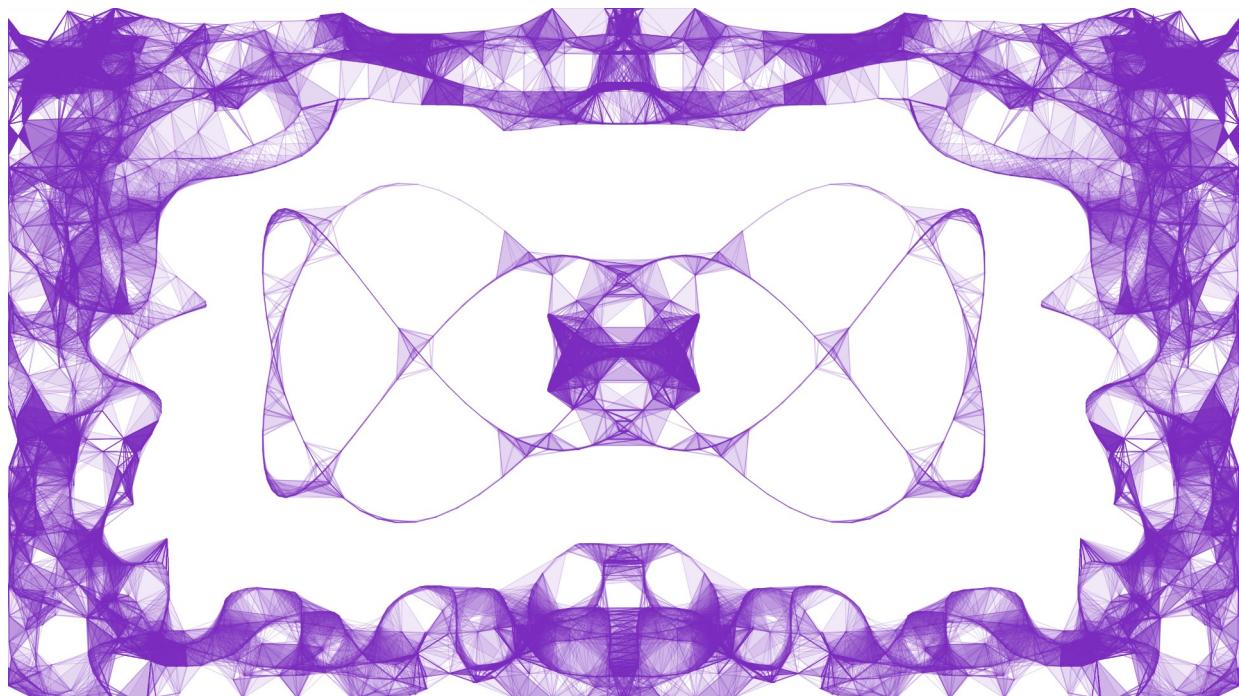
# Lissajous Figure Creations

---

[Click here to view this project.](#)



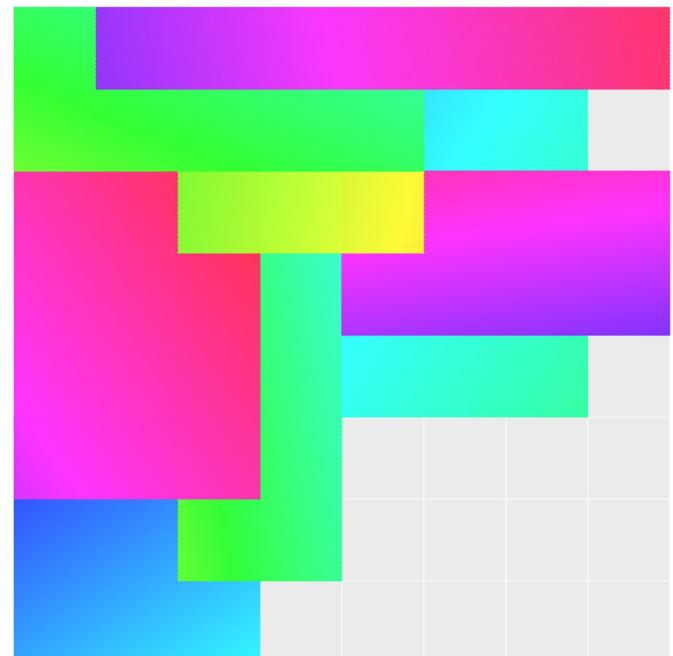
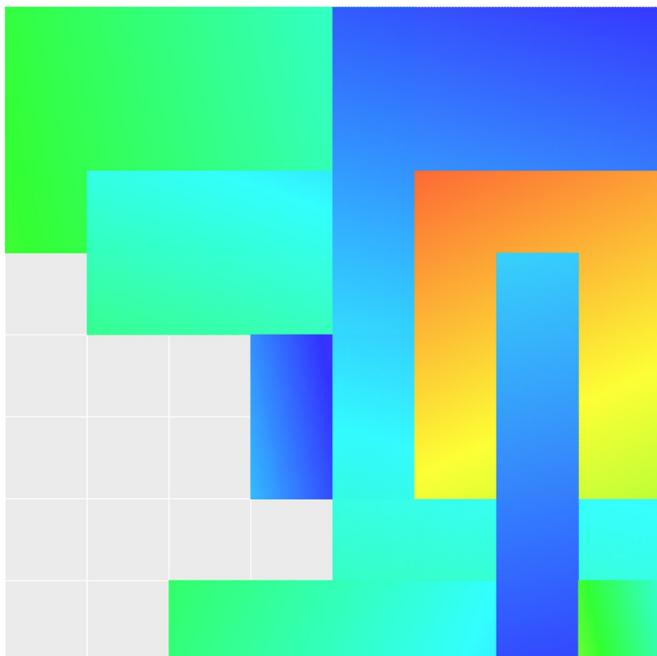
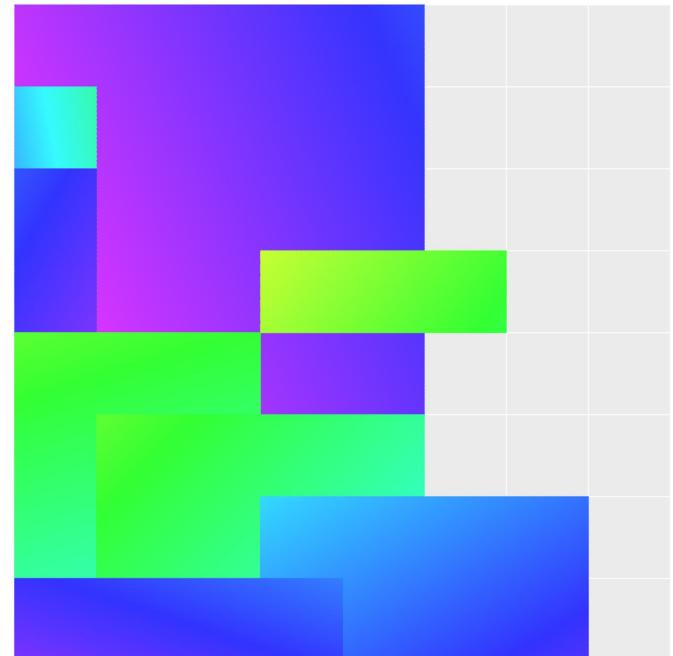
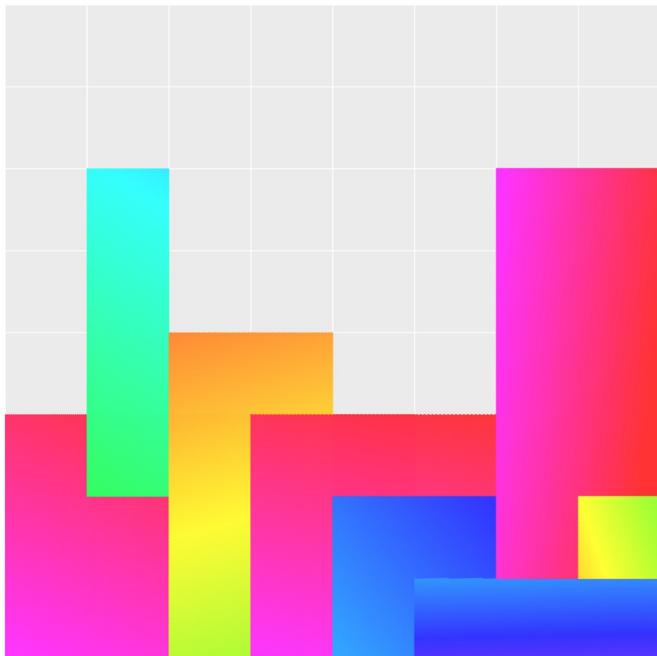
[Click here to view this project.](#)



# Gradient Block Components

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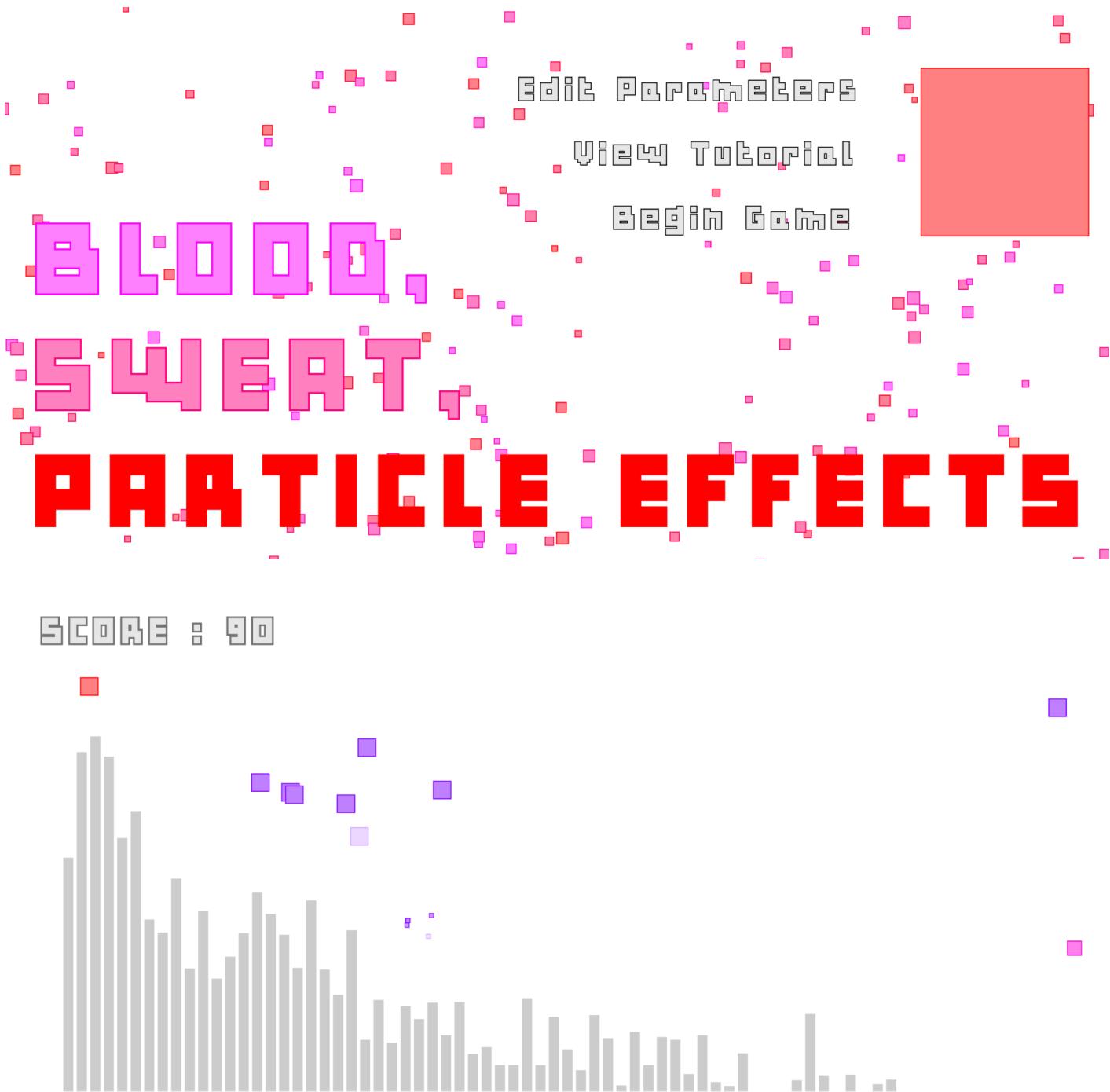
[Click here to view this project.](#)



This project is part of my [Generative Grid Series](#), each design built by pseudo-randomly adding components to a grid.

# Blood, Sweat, Particle Effects

[Click here to view this project.](#)

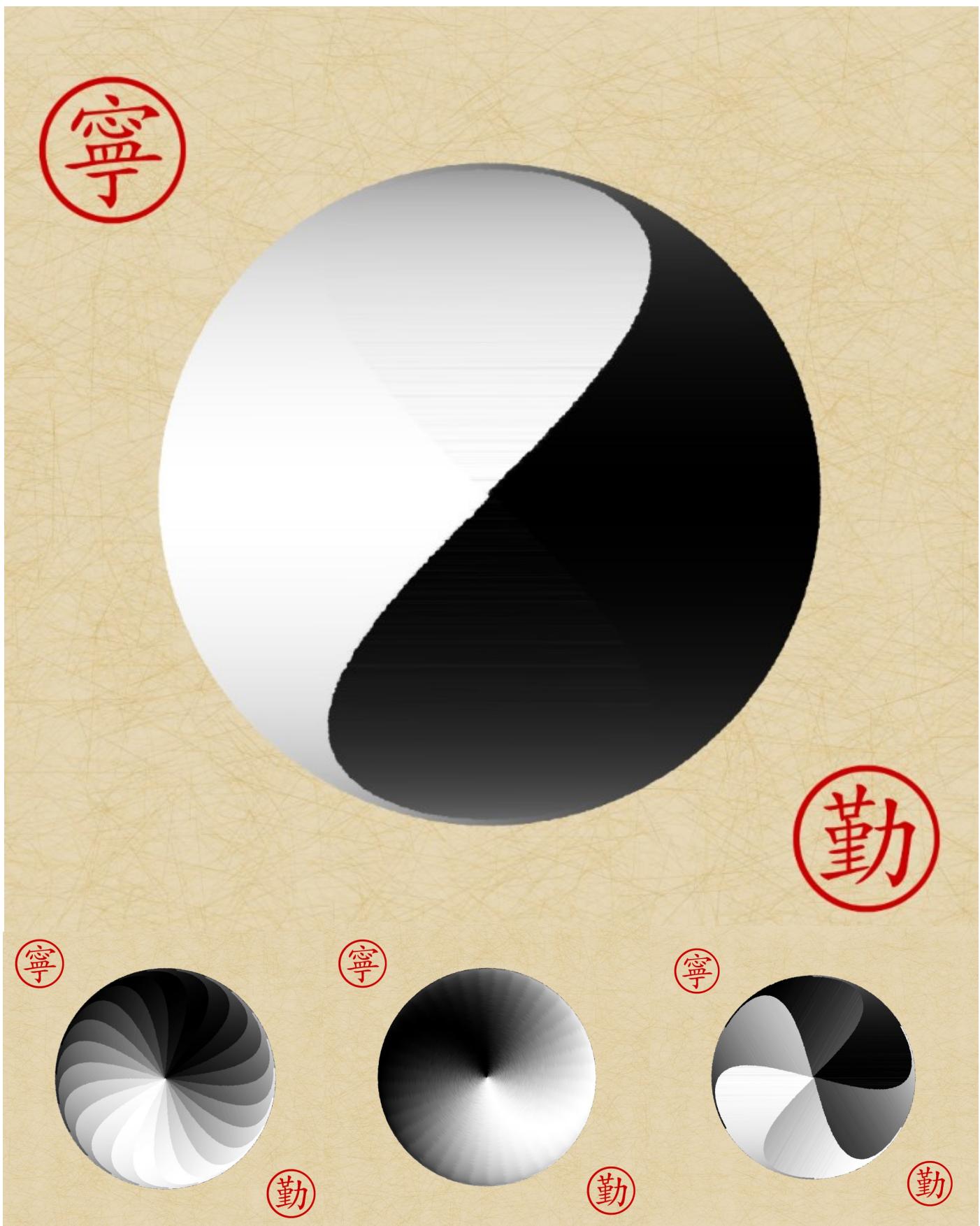


This is a parameterised video game coded using P5.js. The levels vary in difficulty following cues in the music track, with a live music visualiser playing in the background.

# Beyond Duality

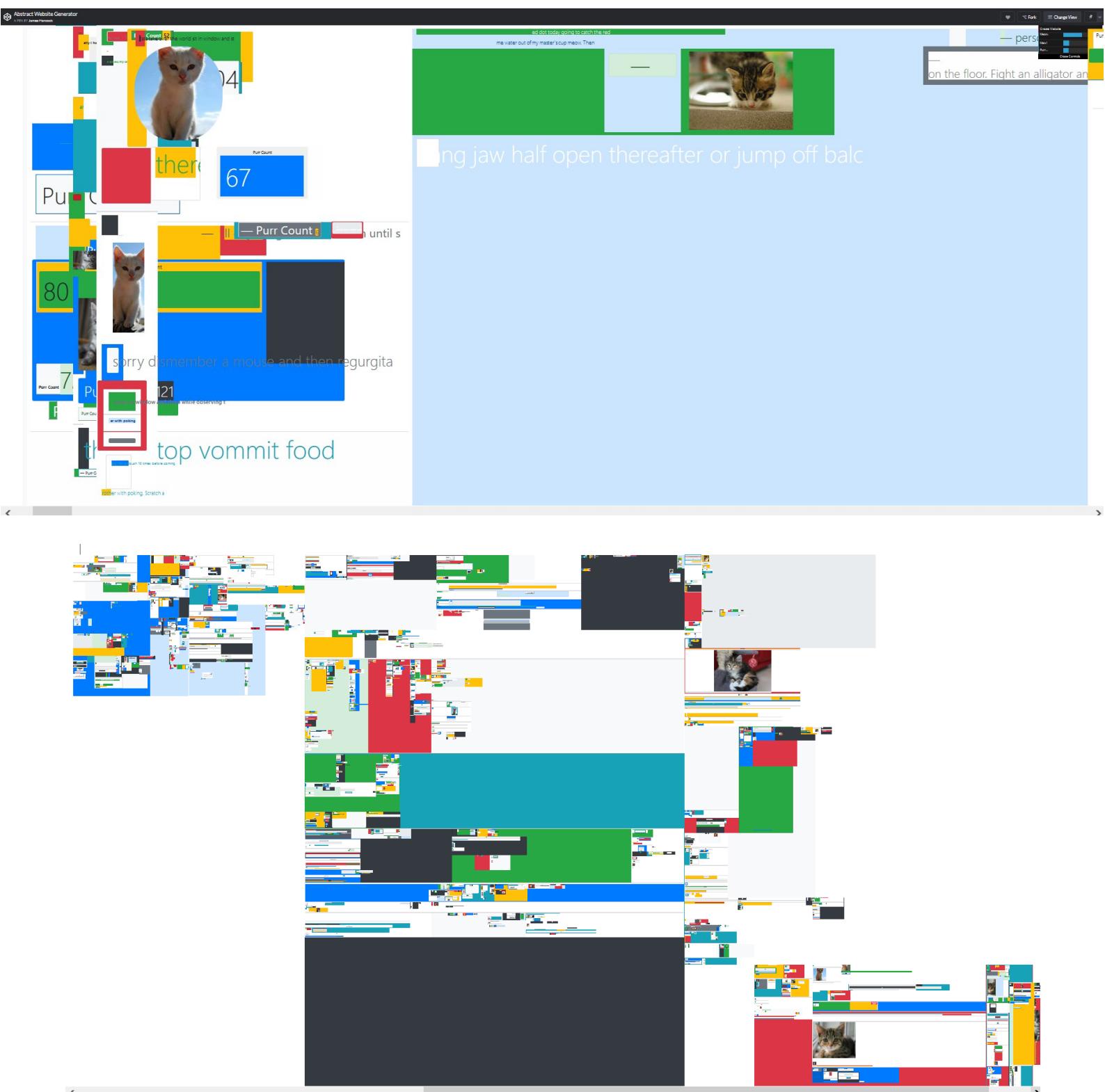
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[Click here to view this project.](#)



# Abstract Website Generator

[Click here to view this project.](#)



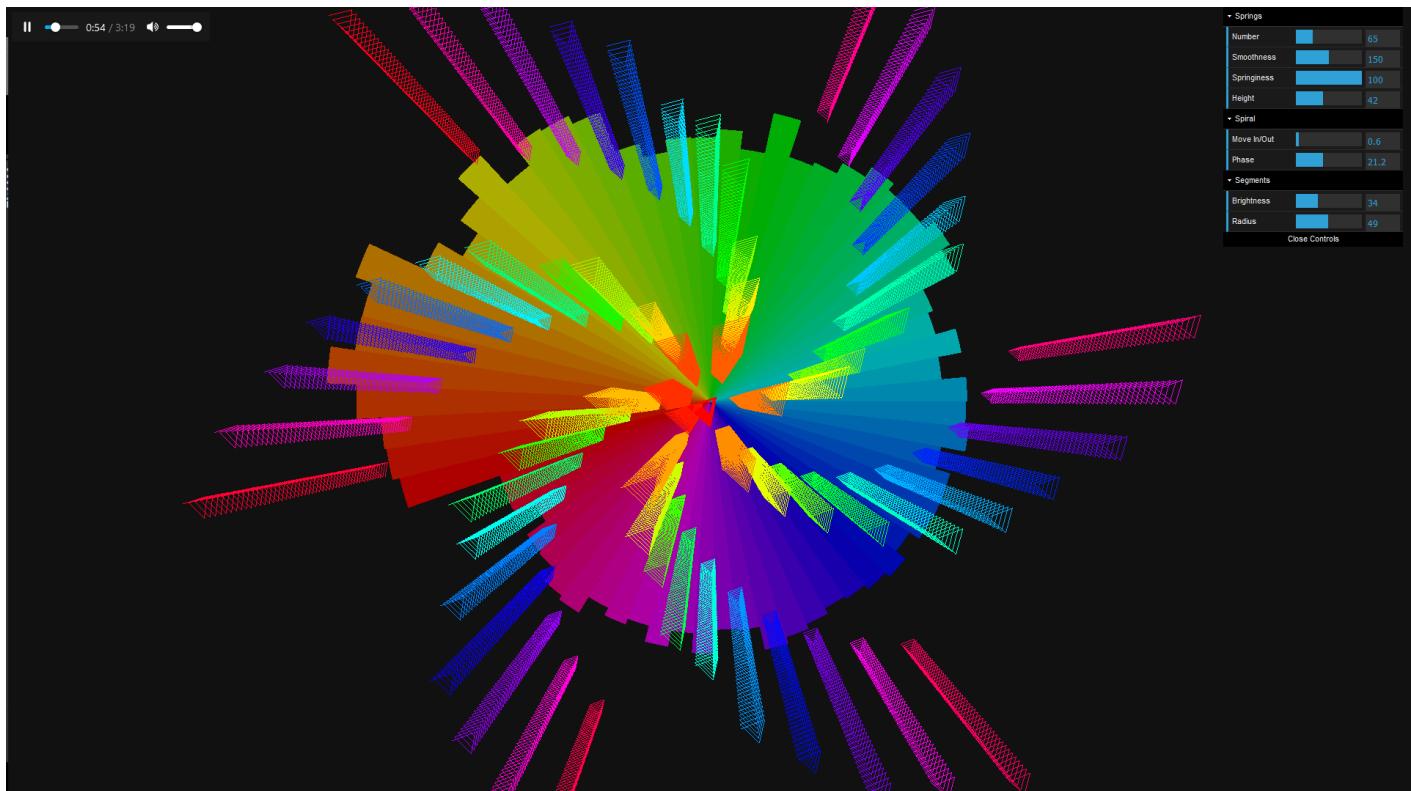
This project's goal was to create a labyrinth of website components.

# Customisable Music Visualisers

[Click here to view this project.](#)



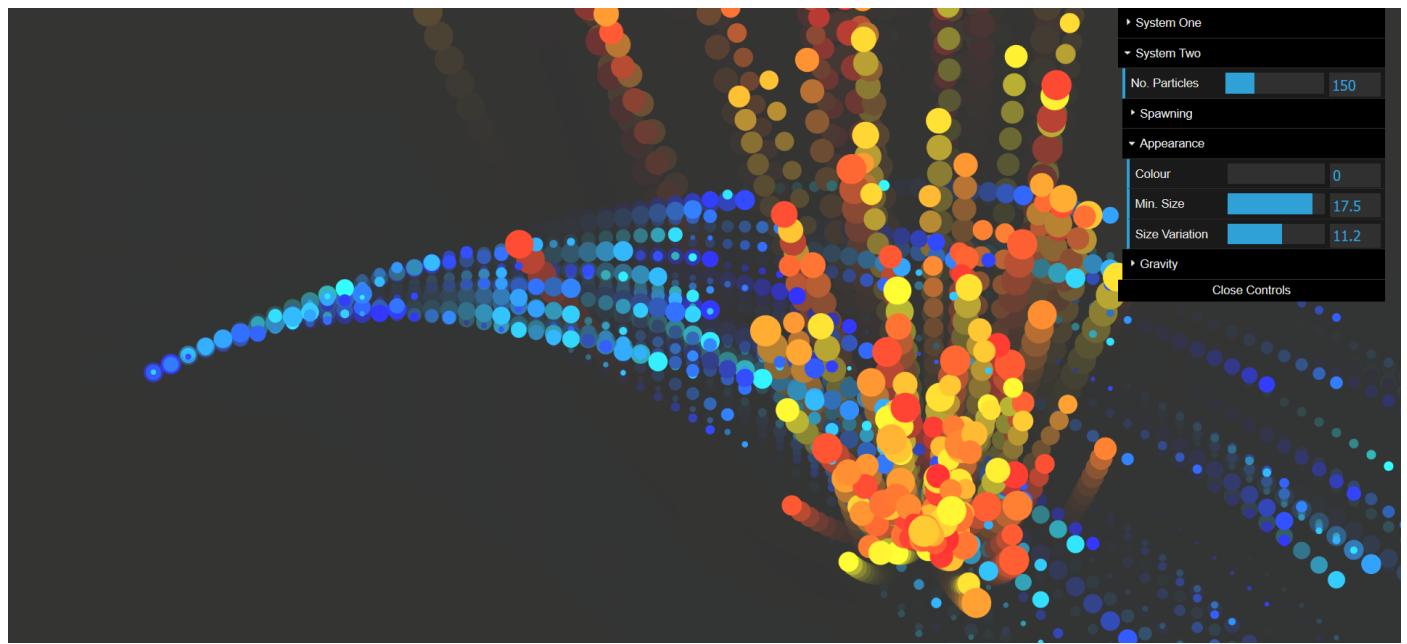
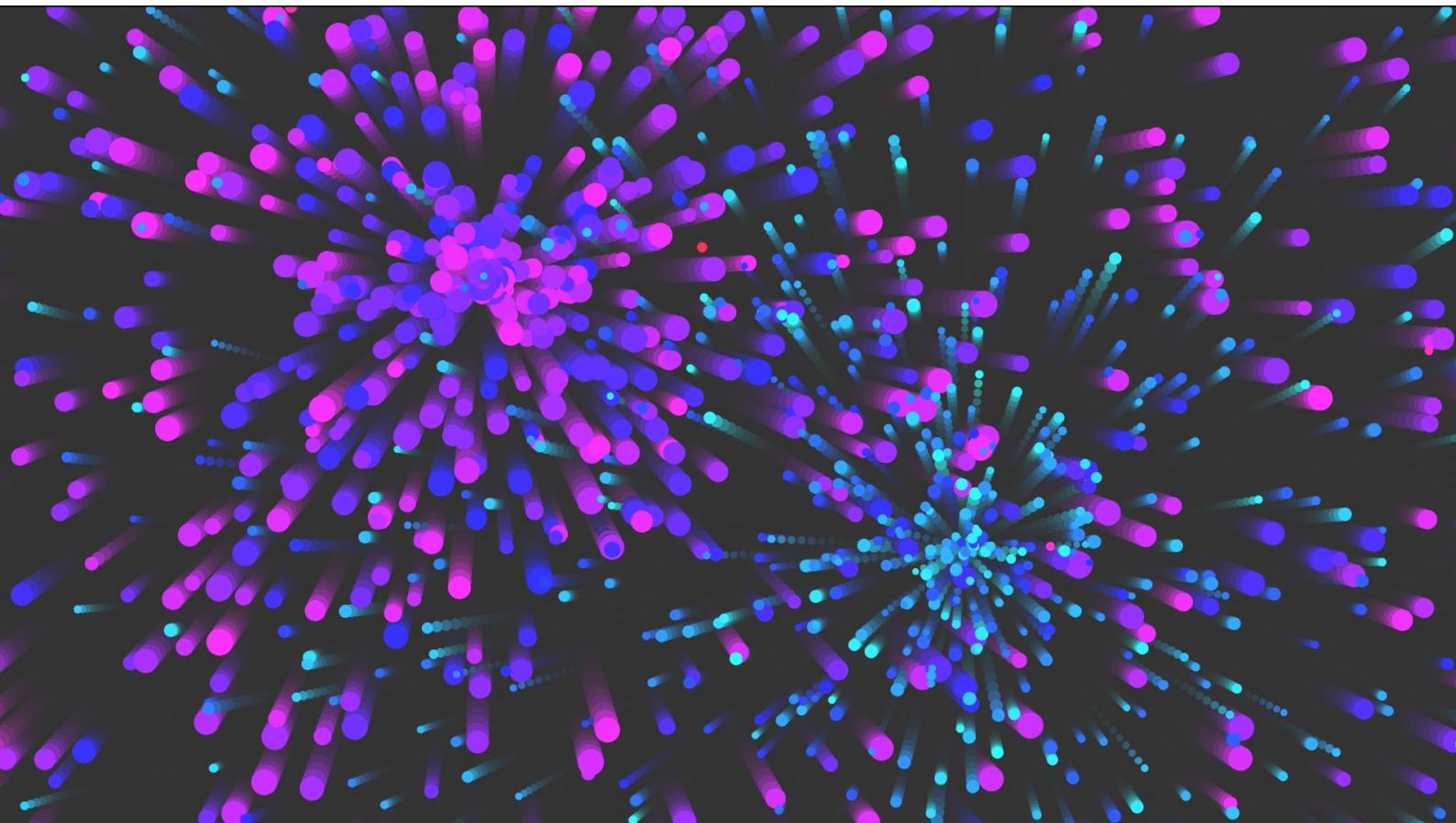
[Click here to view this project.](#)



# Particle Simulator

---

[Click here to view this project.](#)



My implementation of a physics based particle system.

# dontstop.exe & ohyeah.exe

---

[Click here to view this project.](#)

dontstop.exe (%56)

DO NOT... Stop

DO NOT, Stop!

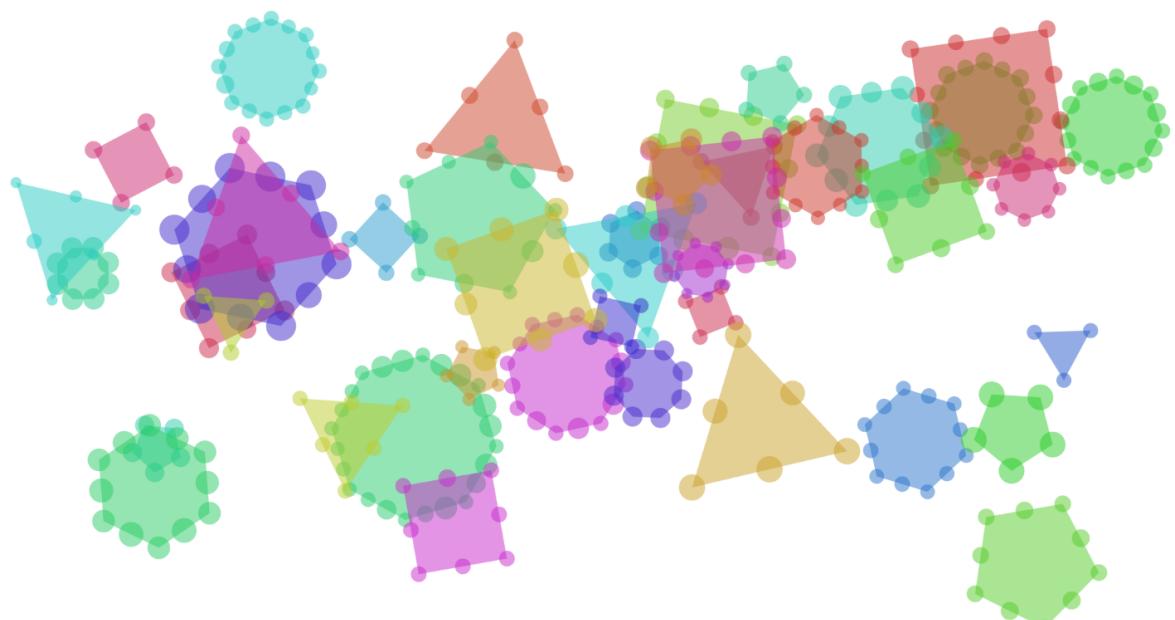
Don't. Stop.

Do NOT... STOP.

DO NOT! STOP...

What if I don't want to?

Do not! STOP



[Click here to view this project.](#)

ohyeah.exe (%28)

Oh? YEAH,

Oh... YEAH!

OH. Yeah.

Oh Yeah!

OH... Yeah...

OH YEAH...

Oh! Yeah.

OH... Yeah...

Oh, YEAH...

Oh? Yeah?

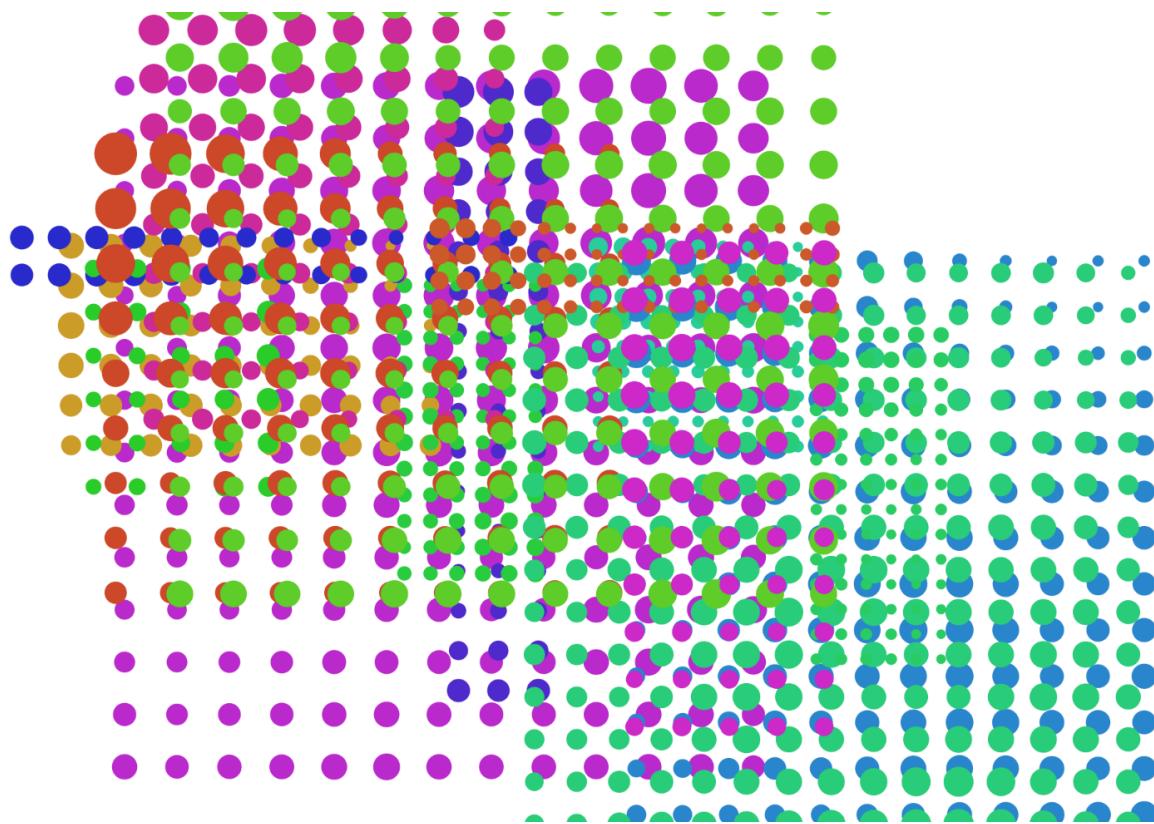
Oh. Yeah,

Oh, YEAH...

Oh! Yeah

Oh... Yeah,

Oh. Yeah

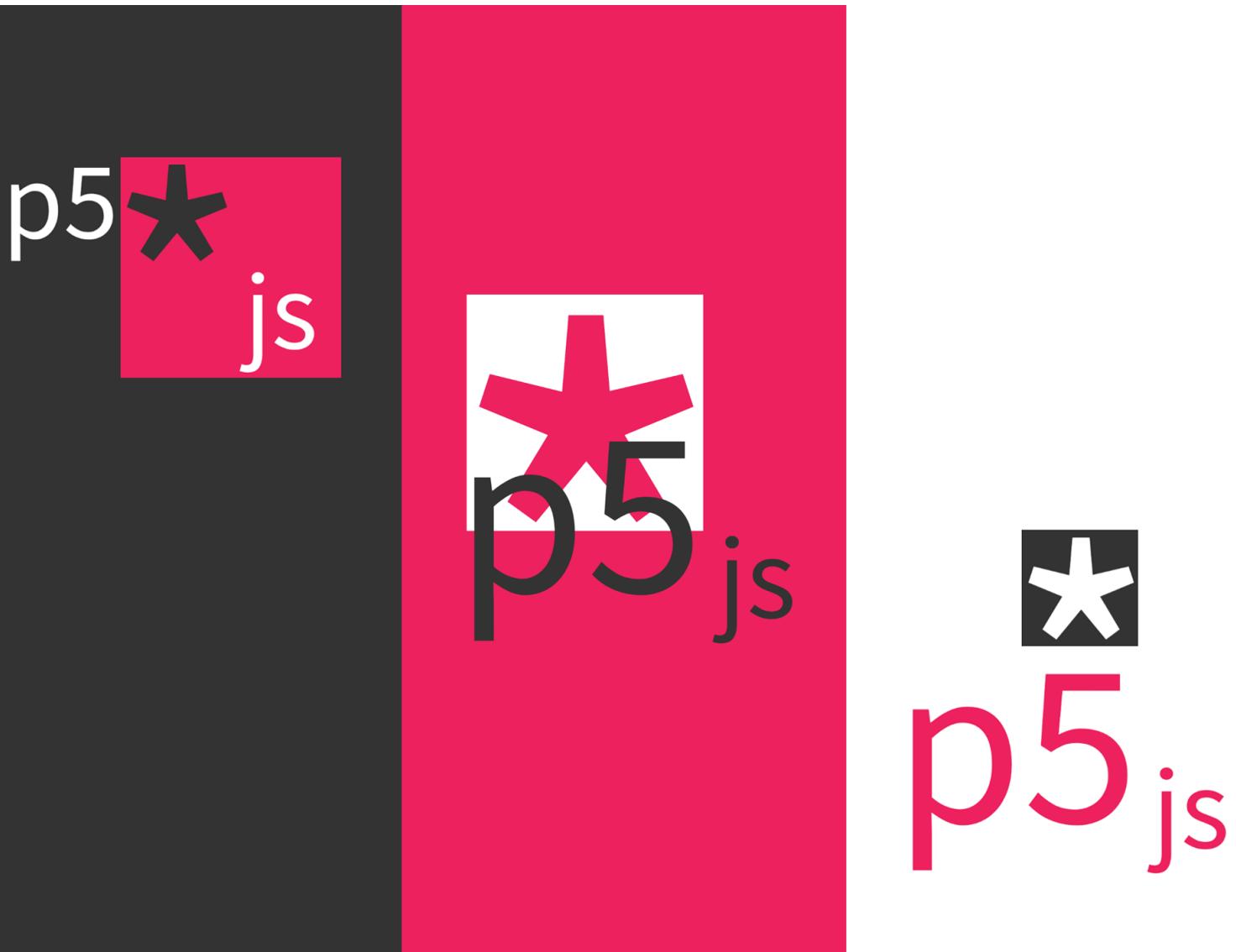


These projects explore permutations and combinations, looking at how meaning can change based on emphasis and tone.

# P5.js Logo Generator

---

[Click here to view this project.](#)

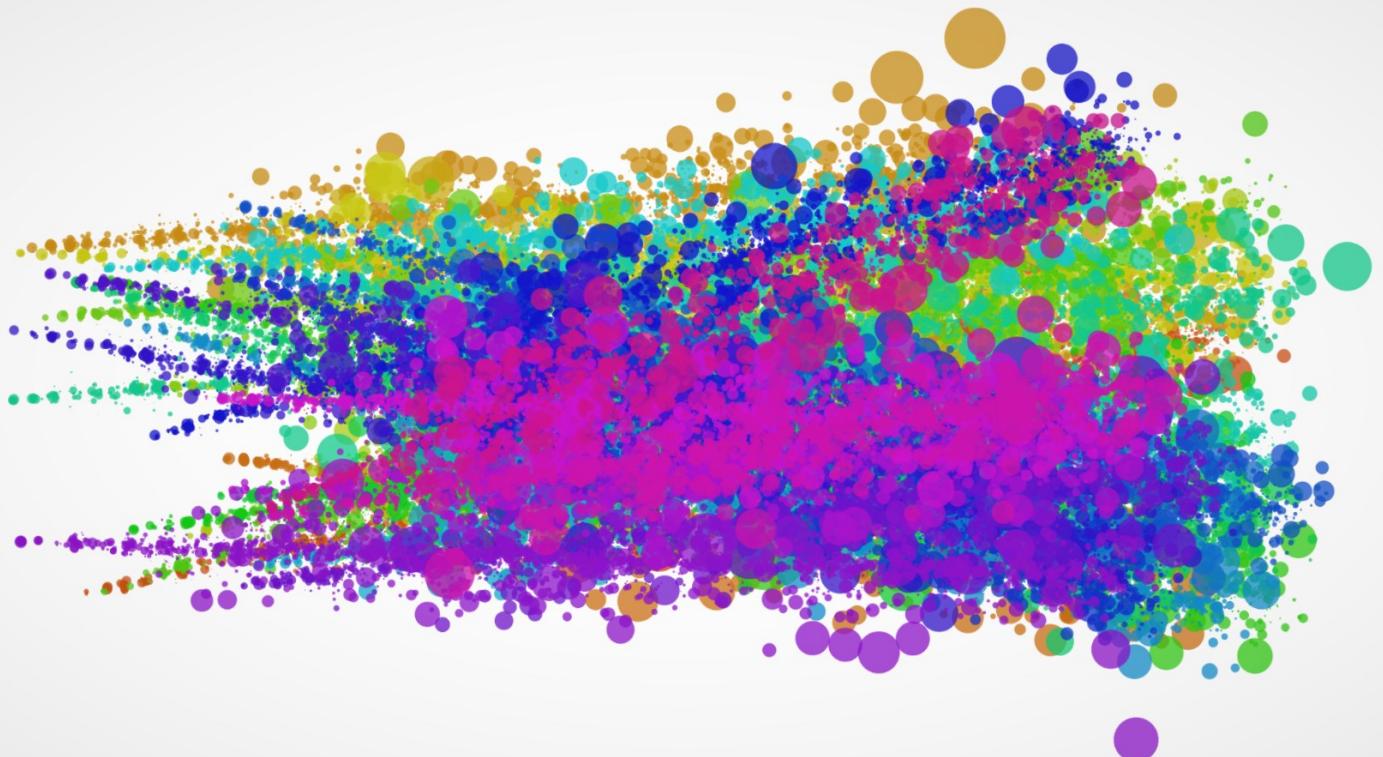
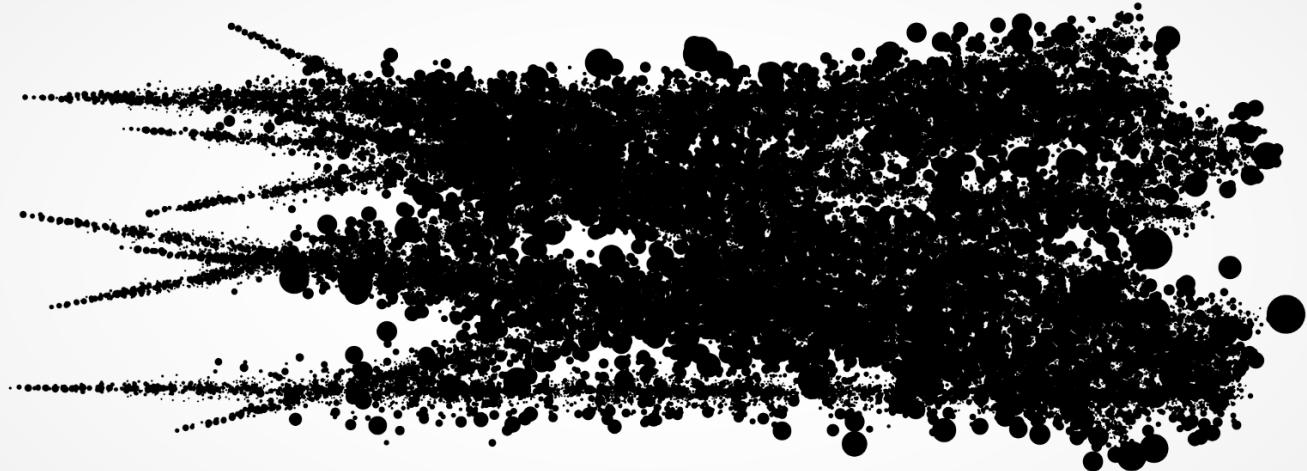


These logos are generated randomly within a 3 by 3 grid, with some rules applied to keep the positioning of the logo elements in the correct order (p5 before js). An exploration into generative design.

# Learning to Paint

---

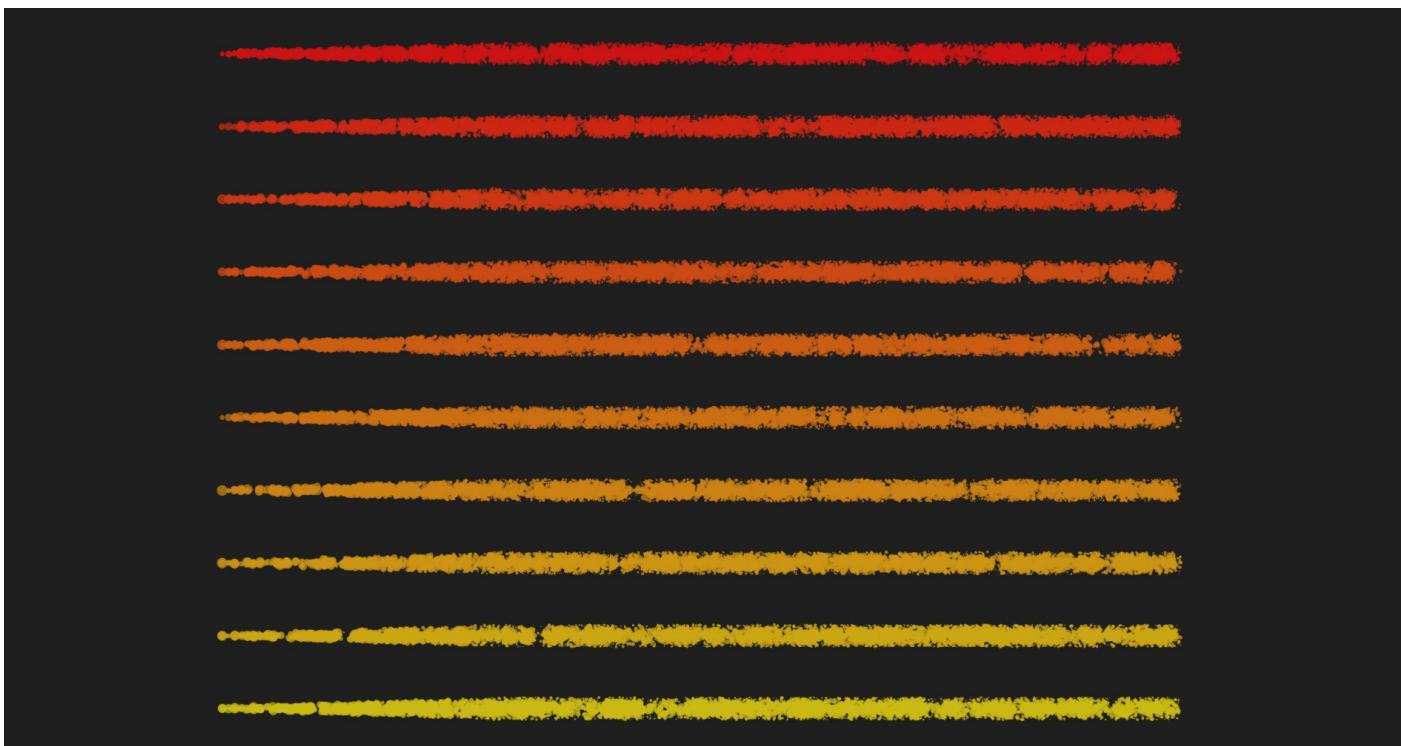
[Click here to view this project.](#)



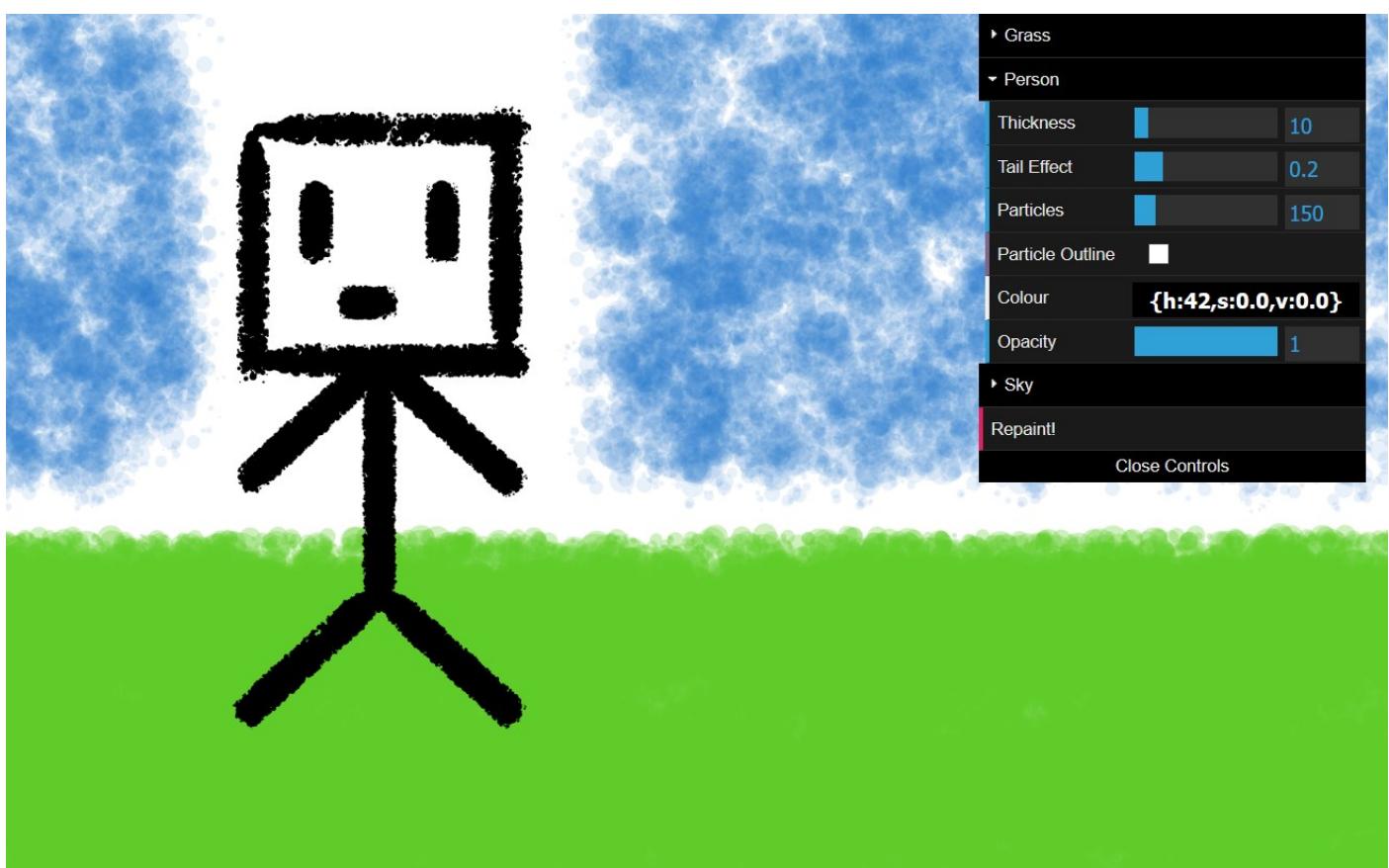
# Learning to Paint

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[Click here to view this project.](#)



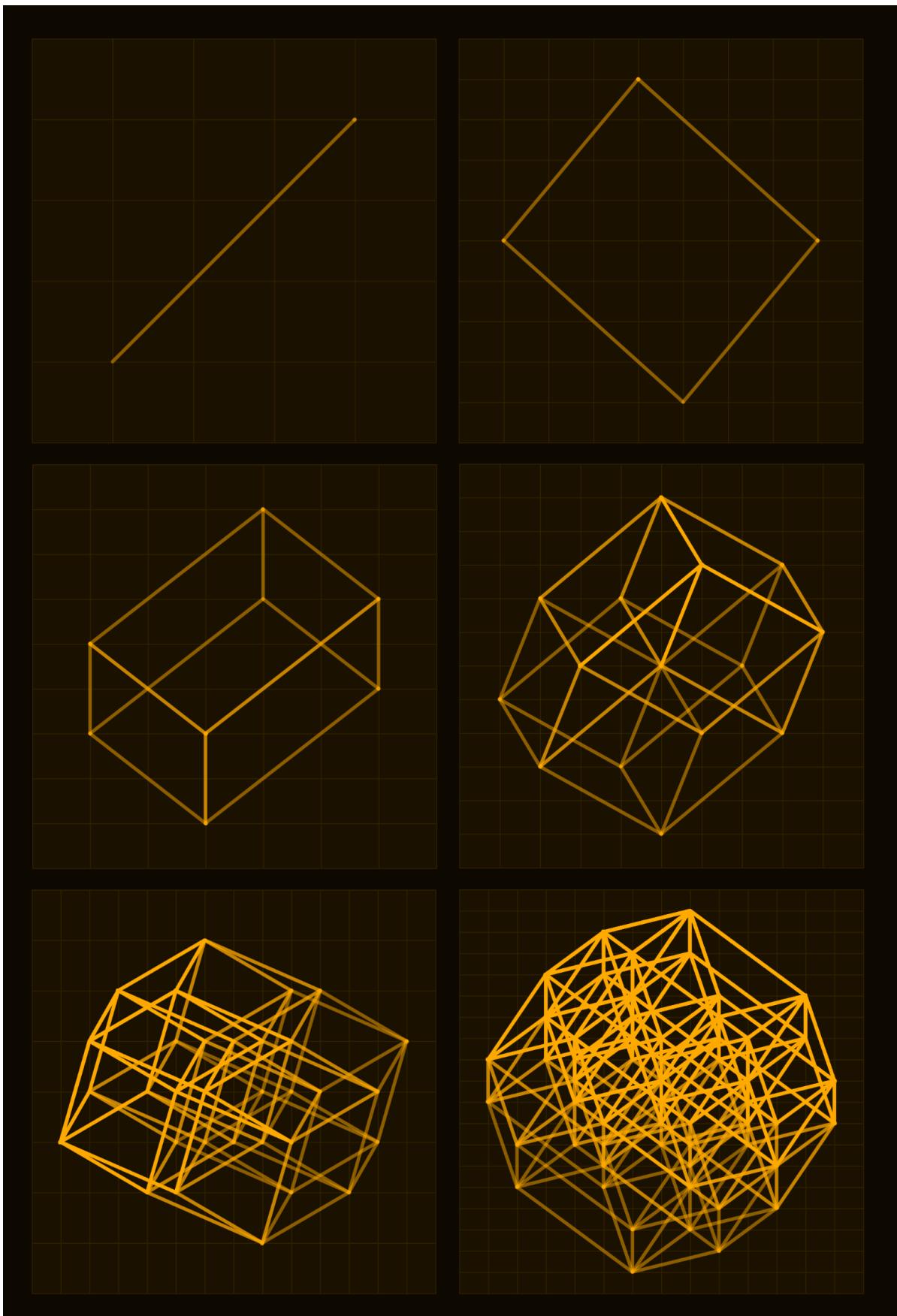
[Click here to view this project.](#)



# Shapes of Many Dimensions

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[Click here to view this project.](#)



# Invasion of the Pink Wool

---

[Click here to view this project.](#)



**NOT ALL HOPE IS LOST.**



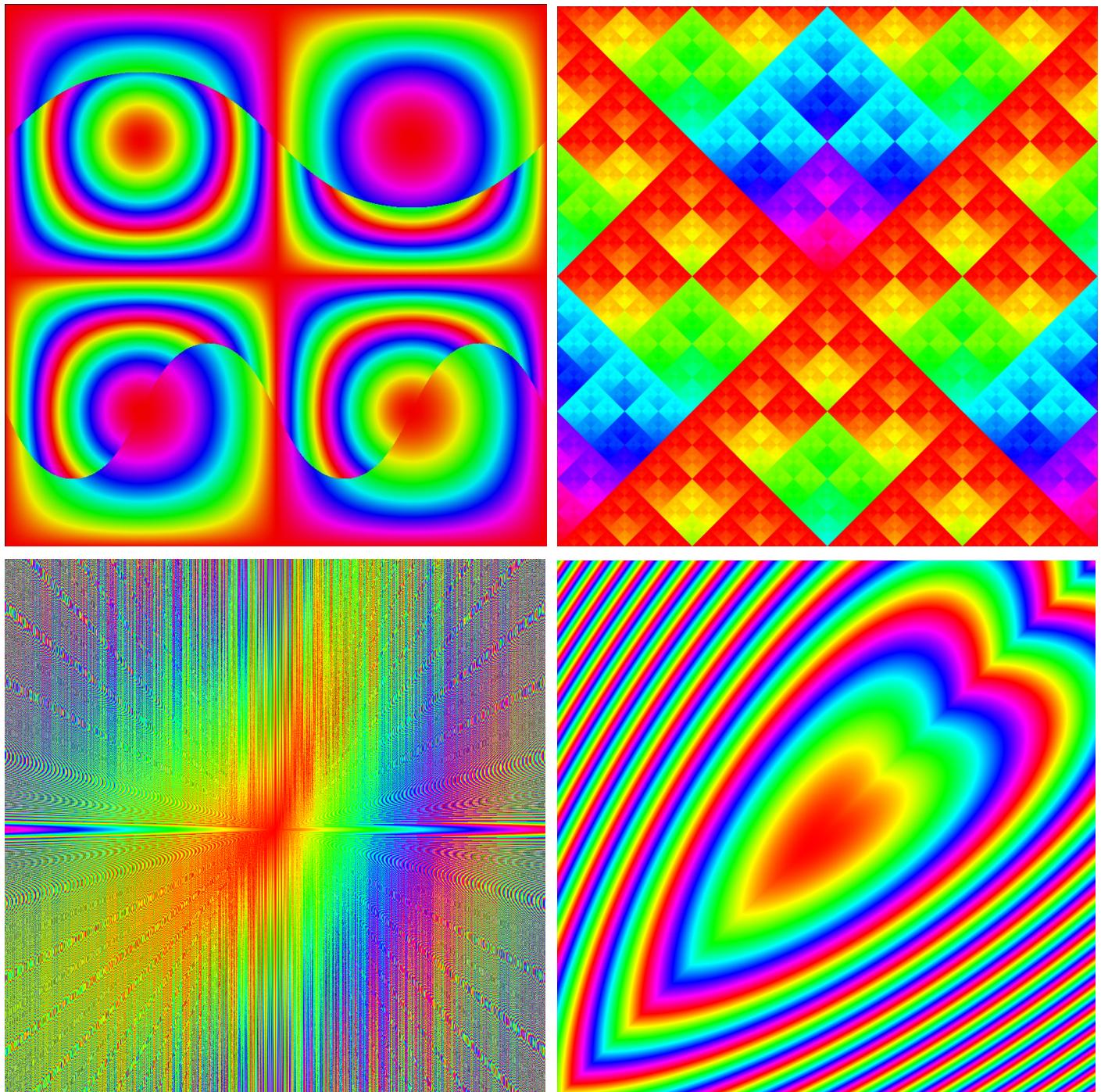
**NOT ALL HOPE IS LOST.**

# Rainbow Mathematics Project

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I created several applications to visualise mathematical functions ([web application](#), with source code [on GitHub](#)). I further experimented by creating animations and music visualisers based on my code.

This project won the Best Maths Project Award and runner up Senior Science Project Award at Sentinus Young Innovators in 2017.



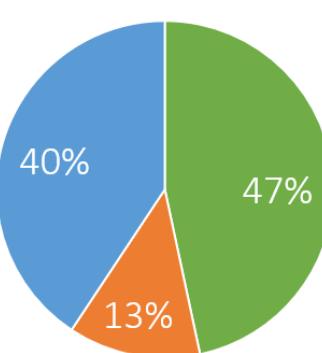
# Twitter Analysis Project

I unpicked trends from the data of over 100,000 UK Twitter accounts and showed how personality traits could be identified from tweets using my analysis app.

Awards include Best Use of ICT at Sentinus Young Innovators 2016, Senior Engineering Runner's Up Prize at the Big Bang Fair 2017, and an invitation to the Swiss International Youth Talent forum.

I measured 42 different metrics across 100k Twitter accounts then calculated the correlations between them. I presented my findings then gave a live demonstration of my app in action.

## Positive, Negative, Passive Emoji



- 47% of all emojis were positive  
13% of all emojis were negative  
40% of all emojis were passive

Relative Percentage Word Use		Account Results	Male Average	Female Average
First person singular :		2.810%	2.250%	3.555%
First person plural :		2.810%	0.500%	0.465%
Articles :		2.810%	5.532%	4.703%
Negations :		2.810%	1.111%	1.101%
Exclusives :		2.810%	0.374%	0.365%
Long Words :		2.810%	14.552%	13.889%

- Confidence is indicated by a high first person plural percentage and low first person singular and negations percentage.
  - A high first person singular percentage suggests the account holder sees themselves independantly.
  - Using a high percentage of exclusives is indicative of cognitive complexity. Combined with a high percentage of first person singular, the account is regarded as being more authentic.
  - There is a significant correlation between the long words percentage and the personality trait of openness. Openness can vary from intelligence to open-mindedness.
  - There is an inverse correlation between being extroverted and the percentage negations used.

# Wellbeing Hackathon Project

---

This project won the Best Individual Hack award for a University of Bristol hackathon, it's a website that collates stories about humans overcoming difficulties in their lives.

## Many Ways

A collection of human stories about overcoming difficulties.

Search for a story by entering text here.

Search

Discover the [principles](#) behind this website, support it by [contributing](#).

Search

Principles

Sign In

We found these search results for self-love.

### Transforming my life long affair with low self-esteem

Evelyn Marinoff describes how she turned a negative relationship with herself into a positive one. She lists the experiments she tried which resulted in this transformation.

love, self-love, low self-esteem, self-esteem

[Read the story here.](#)

Love yourself. It is important to stay positive because beauty comes from the inside out.

— Jenn Proske

# Wellbeing Hackathon Project

The site accepts user submissions (to be approved by an administrator) and offers advertising space to relevant organisations. Further information can be found on the [projects GitHub page](#).



Sponsored Advertisement

## Chat on Big White Wall

You're not alone. Join the Big White Wall's online community for free mental health support through a common forum.

[Click here to learn more](#)

## Related Search Tags

love    self-love    self-esteem    relationships    bad    positive    low self-esteem    good    heart

## Contribute

Submit a story or quote to this website.

[Link to a Story](#)

[Add a Quote](#)

Please follow our [principles](#) when submitting content to this site.

### Form to Submit a Quote

**Quote**

Enter the quote here.

**Author**

The person attributed to saying the quote.

**Tags**

A comma separated list of search tags.

[Submit](#)

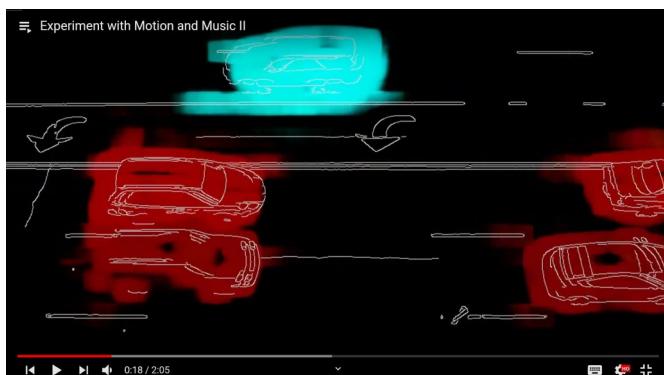
# YouTube Video Playlists

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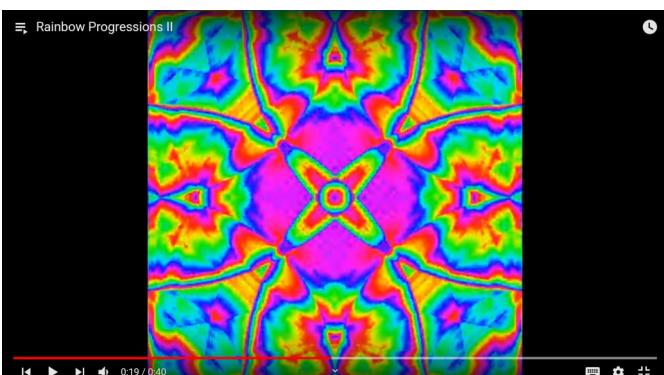
## Online Experiments Playlist

What happens when you condense a week's worth of internet content into one minute? Is there an end to YouTube's recommended videos? Why are there so many dating ads on Gmail?



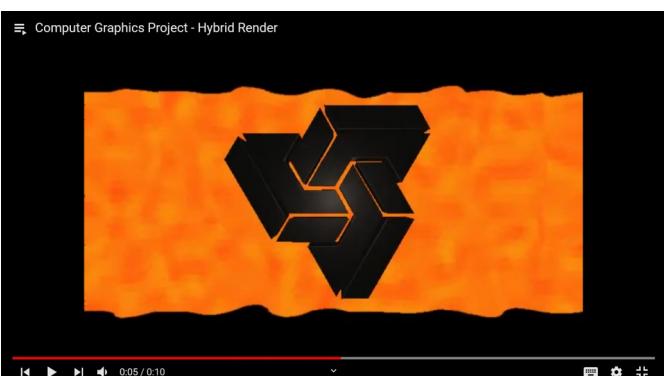
## Motion and Music Playlist

Two short experiments using Python to create a music visualiser. The second version uses a machine learning library to detect drum beats.



## Rainbow Progressions Playlist

Rendered animations of complex R<sub>2</sub> functions, following on from the Rainbow Mathematics project.



## Computer Graphics Playlist

As part of university coursework I coded a rendering engine in C++. Here are three example outputs of different rendering modes.