# SVG Project

### Generative Tiling

<https://frontend.horse/articles/generative-grids/>

* Unused

### Snowman - Amelia Wattenberger

<https://www.youtube.com/watch?v=UobletbX3fk&list=WL&index=3>

* Good Tipes

### Generate Dalmatian Texture

<https://www.youtube.com/watch?v=m-xt03FbCcg&list=WL&index=5>

### feComponent transfer:

<https://vanseodesign.com/web-design/svg-filter-primitives-fecomponenttransfer/>

### SVG Rect Element Basics

<https://www.youtube.com/watch?v=6BwYyscyUdc>

### Creating Patterns

<https://www.youtube.com/watch?v=54N5DP9FgZA&list=WL&index=2>

* Part 1

<https://www.youtube.com/watch?v=ZZLwH8K6Zgk>

* Part 2

### SVG Halftone Designs

<https://www.youtube.com/watch?v=1nj8m7pVMdE>

### Generator Functions

<https://codeburst.io/what-are-javascript-generators-and-how-to-use-them-c6f2713fd12e>

### Color Lerping

<https://www.alanzucconi.com/2016/01/06/colour-interpolation/>

### Linearized RGB

<https://tiberius-viris.artstation.com/blog/3ZBO/color-space-management-srgb-linear-and-log>

### Landscapes: Sine Wave generating Landscapes

<https://kwa.ng/procedurally-generated-svg-landscapes/>

* To visualise Graphs
  + <https://graphtoy.com/>

### The Rope: Sequentially generating points and animating them

<https://muffinman.io/blog/draw-svg-rope-using-javascript/>

### SVG Filter Dev Talk

<https://www.youtube.com/watch?v=kfOhlU_iRVU&list=WL&index=6>

### L-systems

<https://www.youtube.com/watch?v=feNVBEPXAcE&list=WL&index=2>

* The github <https://github.com/simondevyoutube/LSystems_JavaScript>
* <https://www.youtube.com/watch?v=J0LyZSgVKVc&list=WL&index=1>
  + Talks about how the system works

<https://en.wikipedia.org/wiki/L-system#:~:text=An%20L%2Dsystem%20consists%20of,generated%20strings%20into%20geometric%20structures.>

* Wiki

### Generating Procedural Plants

<https://www.youtube.com/watch?v=3Mu0--aGfqg>

### Infinite Plant Variations with Random L Systems Rules

<https://www.youtube.com/watch?v=1hcCpLQwI-c>

### Growing Procedural Plants in P5js

<https://www.youtube.com/watch?v=TOPxa1xIG5Q>

### Infinite Snowflakes: The Basics of Random Generation with P5js

<https://www.youtube.com/watch?v=kUBvhFIwan8>

### For Lerp & Tweening (non linear) -

<https://www.febucci.com/2018/08/easing-functions/>

#### On Procedural Generation

* <https://www.youtube.com/watch?v=WumyfLEa6bU&t=1518s>
* Article version: [Generators](http://www.galaxykate.com/buildagenerator-kcompton.pdf)

#### Inspiration

* [Noise](https://josephg.com/perlin/3/)
* [L-system](https://brehaut.net/media/files/images/lsystems.png)

Noise:

[Graphs for Noies](https://libnoise.sourceforge.net/glossary/)

## SVG.JS

<https://svgjs.dev/docs/3.0/>

<https://www.npmjs.com/package/svg.js>

## Color

<https://www.npmjs.com/package/color>

## P5js

<https://www.npmjs.com/package/p5js>

<https://p5js.org/reference/#/p5/>