

SUBJECT H

1. What is your background / what area do you work/study in?

I work in a small video game/ interactive software studio, I'm the tech artist/creative coding person in the company with a background in flash development (flash player , Adobe Air) I did not formally study programming though (no diploma), all self taught. I'm all very fond of working with audio. I helped create the Citrus Engine (as3/ flash) , a game engine where I introduced some features, I joined the company I'm in because of my participation in that project.

2. How many projects have you used p5.js in / how much time have you used p5.js for?

So far I've managed to use p5.js in one commercial project for the web – I spent a couple of days on it as it was a simple "e-card" for the 2019 new year for a french administrative region. I used processing as well for an automatic VJ setup. Other p5.js projects have been personal, mostly throw away projects to get used to them , none that I've been sharing on the internet though. I think I've been using it for maybe a year only now, since I was more into processing for the performance and the fact that I'm more familiar with java than .js .
(some of my p5.js stuff are on openprocessing but some are cheating because they are not really javascript, they are java)

3. How involved are you in the creative coding community?

I'm not really well known, but I follow a processing/p5.js group. I also love shaders which I haven't gotten to use in p5.js yet. I will be teaching creative coding in a digital design school opening in my area

4. Have you ever been involved in the development of p5.js?

Unfortunately not a contributor to p5.js itself, I wish I was though.

5. Can you give some examples of projects where you have used p5.js? Feel free to explain in as much detail as you want. Here are some guiding questions that can help you:

What was the project about?

In what way was p5.js used?

Why was p5.js chosen to use in this project?

How was it to work with p5.js?

In the survey you filled in that you have used p5.js for art projects. Why did you use the web as a platform for the project (as opposed to using Processing for example)?

Sorry I might have answered that before. So an administrative region contacted my company to create a new year "e-card" for 2019 that would be distributed as an url with a custom parameter in the url to display their name in the sketch. I chose p5.js because it was simple enough for me to get going, instead of getting out the big guns like pixi.js – specially since I needed vector graphics (bezier curves) which I knew p5.js could do, and didn't know that pixi now has a graphics api similar to actionscript where you can draw stuff explicitly (vector lines, curves, etc).

So yeah the web was required to give everyone a custom experience where they would see a text like "Happy new year <Their name here>" and anyone should've

been able to access it even by phone (made sure to make the sketch multi-resolution)

6. What do you see as the primary use case for p5.js?

I would use p5.js only for small sketches with only a couple of simple "scenes" if necessary. I will also be using it to teach part of a creative coding course / workshop since students will in parallel also be working on web design and coding so it will be perfect to use their knowledge of javascript. However I would not be using it for performance intensive stuff – since I have not yet tested custom shaders, and am more familiar with pixi.js's api which comes straight from actionscript I'd most likely use that for something bigger like a web game unfortunately.

- I forgot. I placed a p5.js sketch on my company's website, forced them too ;) it's a little canvas running behind a header, just to add some dynamic visuals to it. Enjoyed figuring out what to do, keep it simple to not make it too distracting but also make it a bit creative. It's just a bunch of colored scrolling 3D boxes :)

7. What are your favorite examples for how p5.js have been used?

Well... anything that's pure p5.js on openprocessing is great, I really like when fake or real data visualization is made with it. I don't have a concrete example here, my likes on openprocessing went to people who used java to code not js so :/

8. Could you shortly describe the other creative coding tools that you have used? You mentioned three.js and pixi.js in your survey answers. What are their primary use cases?

Sure, so I've used three.js commercially for a website selling furniture. We've decided to use three.js for the furniture customiser/visualizer part of the website where clients can change colors and textures of cabinet doors etc. three.js also had the 3D object imported we needed, and I've managed to figure out how to customize the base shader to create shaders for some paint patterns that were necessary. I have used pixi for small web games, the biggest one though was using Phaser.js which uses Pixi but hides it. But so far yes, 3D visualization would be three.js and I will probably have more projects like that in the future. And we have quite a few web based projects that will need hardware accelerated rendering for 2D – so using Pixi.

9. How would you compare p5.js to these other tools that you have used? You already answered this in the survey, but I would like you to elaborate a bit on your answer. Here are some guiding questions that can help you:

What are the pros and cons of each tool?

In projects where you have used three.js or pixi.js, why was p5.js not used?

Generally, in which cases might you use vs. not use p5.js?

Three.js : good at 3d, a lot of work went into supporting different kinds of rendering, shadows and so on, which I believe p5.js can't do on its own, and probably shouldn't anyway. For 2d it's probably useless I didn't try.

Pixi.js : a familiar API to me, also something that p5 and processing doesn't have : a way to track local space of "objects" which is great for complex "scenes" and interaction. I found that, with p5.js, knowing if I'm clicking something is too complicated since I can't really project the mouse position to the local space of an object.

Pixi fortunately has this little framework of tracking matrix transformation and at least helping to test mouse hits on either shapes or groups of shapes, so for interactivity I'd really prefer Pixi (Should've mentioned that earlier).

P5: fast to get something running, when complex interaction is required, or a lot of objects need to be shown on screen I'd rather use a framework that takes care of quad batching and so on. Yet I really like finding most the things that are in processing, let's say it's a great "visual prototyping" tool – and because of that a great teaching tool for js and/or creative coding

once you reach a certain level of visual and interactive complexity though, I don't think it's the best choice . But I don't want p5 to become a monster framework anyway.

I basically answered why I would be using something different to p5 instead.

I could add that p5.js doesn't have a "display list" hierarchy, I mean a parent child framework where I could parent shapes and object (which also helps for interactions, physics etc).

And I just don't use p5.js for 3D because I feel there's something with better rendering; I can use p5.js for very basic 3D---- it's all about the final visual look I'm going for actually. If I want something a bit flat / not realistic sure p5 would be ok.

10. Any final thoughts you want to add?

Hmm. I guess in question 9 I went all over the place, but I think I've said what I needed, I can summarize that :

- quick prototyping, vector drawing : p5.js
- "complex" interactions or performance intensive : pixi.js
 - both for it's performance and the 'display list' parent/child relationships between shapes/images and so one which you have to code by hand in p5.js (I end up doing this every time).
- 3D : p5 when realism of complex shaders are not required, three.js when something commercial and needing better rendering comes up, will probably not use three.js for personal stuff because I like the minimalism of p5 and processing anyway.