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Interview by E.S.

Tell me a bit about your background what's your area of work or study?

I have a background in architecture but I'm currently a programmer/developer but the architecture stuff keeps pulling me into design and code and making graphics stuff mainly with the use of repetition, recursion and the tools available to do that graphically.

Is it more front-end or back-end programming that you do?

The strict stuff that I do is more backend but the flip side is that I like to use presentation stuff like OpenGL or whatever it is to show not just text but an image.

but mainly day to day it is more programming, not graphics as much?

I try to do both but mostly the graphics is in my spare time.

how much like how many projects have you used P5 in?

in serious projects i have used it once but in many experiments mainly to to develop the concept or prototype I use it 10 or 15, just to prototype things because I'm aware that p5 is not the best in performance because they loop is a little expensive, the draw thing, so I try to later use CSS or plain Javascript.

are you involved at all in in the community for creative coding?

im a little bit far from the centers mainly my own country capital is like 500 km north and Chile is very aside in terms of

connectivity of many things going out in the North, but I try to keep updated by facebook and the processing forum or updates that they push. Here I know a few contacts mainly through Twitter and I follow some creative coders, thats my involvement apart from donating once to the processing Foundation.

are you posting a lot or is it more that you're following what others have posted?

mainly following, I think I post my stuff once but no more.

have you ever been involved in in the actual development of P5?

no, i read some source code of the main library but it was too hard for me to participate in on that level

could you give some examples of projects where you have used p5, what was it about and how did you use p5?

I remember, I've used in 2 serious projects. one was a visualization for genomics that represents circle that contains the whole sequence, helps visualize the location of the current genes, the genome. it was an API based representation, you could hover over the colors to make the drawing give you more information about the gene and location. That was a project in a small startup that were making a tool for medical doctors for understand current genomic technologies used. This was more data visualization stuff. the other example was in architecture research, we were developing a tool for energy efficiency so you could draw with P5 an axonometric volume and it was a tool for aggregating different volumes with different size mimicking a building, and then you evaluate the building. But the tool in P5 was just a representation of the building, the current data was in the backend.

so the thing where you used P5 was just for presenting the project or a part of it?

for the volume. Then, the art projects was my own explorations. mainly inspired by the generative current. I remember now the book form and art by Casey Reas (form+code?), I don't know if you are aware of it. the book shows like 10 operations you could do with processing to make art, and it starts from the simple ones, like repetition iteration to more complex and I am also following Daniel Shiffman's stuff to make more motion based stuff.

let's start with the project were you visualize the genome sequences. why was P5 chosen for that?

I think the speed of development was one consideration, to show something quickly, and the other consideration was the ability to cope with the HTML environment and not just in the fixed desktop environment, that was the second consideration and then third, it was a little personal choice because in javascript it will be more tedious work and trying to sort the programming stuff rather than the visualization stuff.

did you know how to use P5 before this project already or was it picked up for the project?

no no, I knew before.

so this project was always supposed to be on the web?

it was a little piece of the project to show to the medical doctors.

how was it to to use P5 in in that project? was it easy or was there some issues that you had with P5 specifically?

I think the issue of performance is still a thing for taking into consideration and the other was the little details like for example the radius you can not choose an increment less than 1 pixel so that conditions the radius, a technical consideration.

Would you say that the performance aspect of p5 was it something that was clearly noticeable?

yeah because of the JSON library, I think it is more expensive in terms of computation than other libraries.

so for the other project that you mentioned, the architecture research, why did you use p5 for that and not some other library?

pretty much for the same reasons but in that case there was a strong inclination to use desktop software to represent the graphics and i proposed the whole thing in the web as software as a service, to show that there was another way to do things and to make it massive, a better reach. p5 has some advantages in maintainability in relation to desktop program that you install. Basic considerations when you propose a SaaS service

for your own small projects that you have used that you talked about the art projects the generative art you have chosen to work with P5 and not not processing itself?

I use both maybe processing is better for more intensive stuff but it depends on the mood. I recall a time that I use a lot P5 and almost never opened the processing two or three, but now I'm coming back to processing to sketch stuff.

why have you gone back to processing now?

I don't know, for me its the same

what would you say is the best use case for it?

the best use case I think for making data visualization that is original. I think a lot of systems to present the data are based on scatter plots and the same basic stuff and I think if you want to propose a different thing p5 could be a huge aid.

You have also used D3 which is more pure data visualization tool

I think you lose more time with D3 in technical stuff, rather than the actual visualization stuff.

**how would you compare just D3 and P5 with each other?
when would you choose to use D3 and when would you use P5?**

D3 for more collaboration among developers because the code will be more standard or better documented in the actual graphic stuff, I mean in the actual plot because it has many samples to work with and things that are already built so you can choose. I think that is already built and modifying a little bit that's D3, but p5 I will recommend to more creative work, but at some point you have to migrate to plain javascript to make it more simpler and more performative.

I looked a little bit at your at your own website and I looked at the projects there, and I saw that two of them you mentioned P5, but for the other, for the web stuff you haven't used P5 and now you've already talked a little bit about the reasons why you don't use it in the final product but,

could you could you elaborate a bit is there something other than just the performance aspect of it?

maybe it's about the suitability of p5 to clients. One example in the web projects, the main focus was to present images and text, so p5 I think it's not so helpful in that choice, but I think for research projects could be a huge outlet of information that is always in tables or in databases.

for future projects in which case it would you consider using P5 and any which case would you not use it?

for example I made a service about public expenses and I prototyped it in P5 like a big column of expenses, because it was public, resembling like a work of an artist that catalogued

headlines of newspapers, so it was a way to convey that, but later I did a version and I stick to a more HTML based presentation, but I think the roots of the HTML presentation are based on on the p5 idea and implementation. I think it's a good example of my way of developing.

has it been a lot of work in the stuff where you have first prototyped stuff in P5 and then changed it over to just plain javascript and CSS. has that been a lot of work to move it over?

yeah, sometimes the translation is not perfect in terms of graphics stuff but maybe the translation allows you to know the limitations of the tool. so it's an exchange.

is there anything you want to add, anything that we've talked about, anything in regards to p5 in general or creative coding?

yeah, I learned to program in processing.

It was 6-7 years ago and it was the choice between python and processing to start. The graphic stuff was very appealing to me and I just started with Shiffman's guidance.

did you learn it by yourself or was it part of your studies?

before my studies as a self-learning thing.

was it the right choice to start with processing?

yeah and i will even recommend it to kids to start with, better than scratch for example, I use always processing because it makes you think about the geometry and coordinate system right away. Actually in the genomic centered company I enter the company because of an educational project of the same leader and it was a project to educate kids around computing and programming thinking so I think processing had pay off in the long run, but not in the way that you always expect.

so do you mean that you have your actually taught other people how to use processing?

not me directly but I gave a lecture to the people that did the actual teaching.