

## audio\_only.m4a

**Andreas** [00:00:05] So, um, yeah, I'll- I'll let you let the discussion here. Tell me about what I have to do.

**Katie** [00:00:16] Yeah, I've just got some questions to ask you.

**Andreas** [00:00:20] Okay.

**Katie** [00:00:20] So firstly, do you have a bias towards any particular language? Either R or Python.

**Andreas** [00:00:25] I- I prefer a much, much more familiar with R than Python.

**Katie** [00:00:32] Yeah, I was kind of assuming seeing as you taught me R in second year.

**Andreas** [00:00:38] Yeah. So you- you were in my class?

**Katie** [00:00:45] Yeah, I was. A few years ago.

**Andreas** [00:00:49] A few years ago.

[00:00:51] Yeah.

[00:00:51] But you were you were on on Placement last year, then?

**Katie** [00:00:57] Yes, I was- I was on placement.

**Andreas** [00:00:59] So it was two years ago then.

**Katie** [00:01:01] Yeah. So I've kind of done, well since then yeah, I've done placement, third year and now I'm in master's year. So.

**Andreas** [00:01:07] So you were, you were the year that they did the Zombie Dice code?

**Katie** [00:01:20] Um, I really can't rememeber

**Andreas** [00:01:23] What I think the boardgame that they did last year was Zombie Dice, that year.

**Katie** [00:01:31] I remember something about crabs coming up in the exam.

**Andreas** [00:01:35] Okay.

**Katie** [00:01:35] I think.

**Andreas** [00:01:36] Okay, yeah, yeah.

**Katie** [00:01:39] Yeah, yeah, that kind of get me started on R programming though and then I did it all year on placement.

**Andreas** [00:01:51] Okay. I'm getting I'm getting old, I really can't put the can put your face in my class. So I'm getting old.

**Katie** [00:02:00] You probably see a lot of people, and also I kind of make a point of not drawing attention to myself a lot of the time.

**Andreas** [00:02:06] Okay. Okay.

**Katie** [00:02:10] But um, anyway, yeah. With the code- do you have any sort of initial comments on the code. As in like readability or functionality or whatever.

**Andreas** [00:02:20] I don't know. I found it very, very busy. You know, I know- I know you're using the code to change some different parameters. But for me, when I do plots, visualisation and all these things, I, I do the you know, I rarely deal with them different parameters, I'm just doing a simple plot as possible that gives out the message as clear as possible.

**Katie** [00:02:51] Okay.

**Andreas** [00:02:51] Okay?

**Katie** [00:02:52] Okay, yeah. And sort of next, do you feel like the code- either code could be changed in any way at all? Um just in your opinion.

**Andreas** [00:03:10] Not really. I mean, I have it here in front of me. It depends. It can be changed. Yes, it can be changed. And in the sense that that is no reason to. I feel like sometimes there is no reason to complicate the complicated code just for visualisation purposes. Sometimes you can achieve whatever you want with a much simpler code. Yes, but at the end of the day, to what you like to do, right? I mean, that is no wrong or right, I'm happy either way. As long I'm not the one writing it, anyone who wants to do whatever they want, they can do it essentially.

**Katie** [00:04:02] Okay, and then sort of, based on sort of the codes and your own knowledge, how well suited do you think each language seems to be to visualisation?

**Andreas** [00:04:20] Now I know- I know that in R, you use that special package, the ggplot package, which theoretically is suited for visualisation. In Python, I am not sure, it doesn't seem that you used any special package. So I'm not I'm not really sure how to compare let's say, um, the two. I will say that er, if you- if you- if you have used the, let's say the standard packages in R, I would have told you that maybe maybe not the wisest choice to do if you want to change the parameters, but using the ggplot package at least, you know, if you use something that is specifically designed for visualisation, so it should be suited for visualisation, okay?

**Katie** [00:05:26] You'd hope. And sort of talking about the sort of like, the two visualisation libraries I've used, sort of ggplot and matplotlib, Which do you feel would be easier for a beginner in visualisation to learn if they had sort of an equal amount of R and Python experience?

**Andreas** [00:05:46] I'm biased to that.

**Andreas** [00:05:51] Okay, this is why I asked the first question, "Do you have a bias?"

**Andreas** [00:05:54] I'm biased towards R, um I think, I think it's, I don't know it's very simple that ggplot functions. It's you know, it's very simple to change the parameters and do whatever you want to. So at least, you know, I'm using it, I'm using it much more frequently, I use Python, you know, I'm not that familiar with Python because I use it a couple of times and just very simple programming exercise and have to get a feeling of it. So. Yeah, I'm definitely going to go with R.

**Katie** [00:06:33] OK. I'm now going to show you a couple of the plots that were generated with the code. And I just want you to sort of for each, so I'm going to show you two different ones in both R and Python versions. And I would just like to know which one you feel is, sort of gives a more publication ready output. That's my emails. Yeah, so these are the first two. So these were just sort of the- I don't know what that is doing up there, that's not supposed to be- Yeah, these are just some of the most difficult possible, sort of no changes to the axes or anything, no changes to the scaling. And just which do you feel is more just publication ready straight from the output?

**Andreas** [00:07:38] I would say the let me- this one [circles the R version].

**Katie** [00:07:45] Oh, thank you. OK, um do you have any sort of reasoning behind that or just-

**Andreas** [00:07:52] I like I like the the the fact that you don't box it, essentially.

**Katie** [00:08:10] Mhmm, okay, and then these two. So these ones are, so I changed it to a logarithmic scale, and the numbers down the sides are just what, so what R and Python, respectively, output as the numberings on the scales.

**Andreas** [00:08:29] I'm I'm not I'm not going to- I don't I don't think the logarithm it helps in any way. So in that case, I'm I'm still going to start with this one here, because it doesn't it doesn't look like the the logarithm helps.

**Katie** [00:08:57] OK. And just kind of as a final thing, I think you've kind of already answered this, but um, how much freedom do you think each language allows for sort of customisation of features like, um, scale and colouring?

**Andreas** [00:09:16] I think I think both of them allow the freedom to do things, is that I'm just feeling more comfortable in R essentially to this than in Python because I did it much more times. It's not that I feel R, it gives you more freedom, I do believe, as I said, if you if you go to the standard package, you're not maybe you don't have as much freedom as you have in the ggplot package or it's not as easy to change things as it is in the ggplot package. But given that you are in the ggplot package, I think you have as much freedom as you want to do, to do things. And and I do believe in Python you do have the same freedom, so it's not- In terms of freedom, you can do it in both languages. The- the most, let's say, challenging thing is probably, knowing how to do it.

**Katie** [00:10:20] I'm kind of I'm with you on the being biased in R, which is an interesting the three people I've interviewed so far, obviously including Vince and Nikoletta, are very biased towards Python. Yeah, so it's interesting.

**Andreas** [00:10:37] Okay. So what do you- do you have any other questions?

**Katie** [00:10:41] Sorry?

**Andreas** [00:10:42] Do you have any other questions or can I ask something now?

**Katie** [00:10:46] My last question is, do you have any other comments? So, yeah.

**Andreas** [00:10:49] OK, no, I just wanted to ask, what exactly are you trying to understand out here in this project? Out of curiosity.

**Katie** [00:11:02] I have to try and put it into words. So, you know, I kind of know what I'm trying to understand, but just wording it is er- so it's just, yeah, it's just an exploration of visualisation in general really. This interview is just kind of figuring out sort of opinions on sort of which languages are good for visualisation, which languages people think are good for visualisation. Which ones? So it's just kind of a discussion of sort of the pros and cons of each language sort of like subjectively and objectively. So these are kind of going to be combined, obviously, with all that research, literature reviews and things

**Andreas** [00:11:45] Mhmm, okay. Good, good.

**Katie** [00:11:50] Hopefully it should be- like based on a couple of interviews that had so far it should be interesting to discuss.

**Andreas** [00:11:57] you know, can, you know, send around the report after you're done send around report. I'll be more than happy to read it. OK, OK.

**Katie** [00:12:09] Yeah, I will do.

**Andreas** [00:12:10] Good. Thank you.

**Katie** [00:12:12] Thank you for your time.

**Andreas** [00:12:14] Thank you, Kate. Good luck with everything.