0:47

Alexey

**This week, we'll talk about recruiting data engineers. We have a special guest today Nicolas. Nicolas is a technical recruiter who is hiring for a wide variety of engineering and AI roles. He worked for many years as an in-house recruiter for companies in retail. Welcome Nicolas to our event.**

1:12

Nicolas

Yeah. Thanks for having me.

# Nicolas’ background

1:15

Alexey

**Before we go into our main topic of recruiting data engineers, let's start with your background. Can you tell us about your career journey so far?**

1:23

Nicolas

Yep. In terms of education, I've studied international business for several years. Then I did a Master's degree in HR. That was a broad topic. Then I started my career in the tech industry. I've been working for the tech industry, really, since the beginning. I first joined after graduation, a company called Criteo – they are leaders in online digital advertising and personalized advertising. Here, I started as a sourcer, also known as a recruiter, and I've been hiring for different kinds of roles. Most of them were software engineering and I had a focus on anything data, so recruitment for data analysts, data engineering, data science, machine learning engineering, and also research scientists as well.

I helped build the AI Lab of these companies, which is pretty successful. Since last year, I've joined a company called Onfido, which is a British company. Basically, they are in the field of online identity verification. Here, I’m doing pretty much the same thing. Both companies are very data and machine learning oriented/focused. Here, I'm working and hiring for four different locations across Europe.

3:10

Alexey

**Which countries?**

3:12

Nicolas

We have the UK. Then we are hiring in France, Portugal, Netherlands and Germany. Maybe more soon, we hope.

3:26

Alexey

**You said you were hiring – maybe it was for Criteo – but you said you were hiring research scientists. But now at Onfido, what kind of roles and levels do you recruit for?**

3:40

Nicolas

Yeah. For now, we are hiring for mostly I would say, intermediate to senior levels in terms of profiles. Literally I have a bit of everything. I do hire backend, frontends, I do DevOps, I do security engineering, I do research. I also work on the data analytics piece. You can have BI analytics, data engineering, and we are also hiring for machine learning engineering. Basically, I'm just hiring for everything for software. I'm not really working for products, for example, roles at the moment. But I can help if needed.

# The tech talent market in different countries

4:33

Alexey

**You mentioned that you are looking for candidates in four countries – the UK, France, Portugal and Germany. I’m wondering how different are the candidates that you find in these countries and processes? Is it the same or different? Did you see any differences in these countries?**

4:58

Nicolas

No. This is more about the market, really. The UK and London, more than 10 years ago, I would say was the place for tech. Then Berlin grew a lot, and Paris too. Obviously, the Netherlands, as well. But you do have some countries where you have a more lively tech scene, I would say. Portugal is also doing pretty well, over the last few years. For me, I would say the difference is more the number of tech companies that you have. We could observe a difference like 5-10 years ago. Now, it's less different.

6:02

Alexey

**I imagine in London, when you hireded people, you needed to compete with all the big names – all the big tech companies, right? But in Berlin, you mostly compete with startups. Maybe this is the difference.**

6:15

Nicolas

Yeah, but it depends. Because now you have companies hiring across different countries, you have less and less borders, especially in Europe. In the end, for example, when you hire within the EU, whether you hire for example, in Germany, it's not only Berlin – you can hire someone who's basically anywhere in the country. But yeah, there’s competition in the sense that you have more and more companies – more and more high-demand jobs as well. Now it tends to be borderless recruitment.

# Hiring data scientists vs data engineers

6:59

Alexey

**Okay. Interesting. Actually, the reason I reached out to you a couple of weeks ago and invited you to this podcast is because we had a different podcast episode that was about hiring data professionals – where we talked to Alicia, who was a guest here – but we mostly talked about data scientists. Then some people reached out to me saying, “Hey, that was a cool episode, but we want to hear more about data engineers.” So here we go.**

**We’re talking about hiring data engineers, but I also wanted to ask you – you are recruiting for a wide range of positions: ML engineers, data scientists, data analysts, data engineers – in your opinion, what is the main difference between hiring data scientists and data engineers?**

7:48

Nicolas

Yeah. I would say that there's two different things. You have kind of a ratio between tech and business, in terms of skills. After all, it really depends. In data science, you have data analysts who call themselves data scientists and vice versa. For me, a data scientist is someone who will work on things like feature engineering, for example. So you don't have the same ratio between tech and business in terms of skills. The other thing is really that, as we've seen in the last five or six years, there’s this very big hype about data science. We've seen that it was purported to be one of the hardest jobs, or one of the most high demand jobs in the market. So the difference, I would say, is that for a data science role, I have plenty of applications, because you have this hype around it.

For data engineering, it's less so. It’s starting to be hyped, though. To me, this is also something that is in the natural order of things, really. Because when you have companies who would much prefer to hire data scientists in the last years – now some of them realize that maybe it could be a good idea to have engineers that will deal with the data and data pipelines and all these spots. So to me, this is really in the natural order of things. The other thing is that, we’re also seeing lots of universities and engineering schools providing data science-specific tech training and diplomas, which is not at the same level nowadays. I'm not sure there's that many purely data engineering Bachelor’s degrees or Master’s degrees. I mean, not yet.

If it follows the same trend as data scientists, this should happen pretty soon. For me those are the main two differences. Yeah. One is much more hyped up than the other one and we don't necessarily have formal training for being a data engineer. I'm sure it's gonna happen, but you have to be a bit patient.

11:06

Alexey

**I think data science was quite commonly romanticized like, “This is the perfect job where all you do is machine learning.”**

11:16

Nicolas

Yeah, like “This is the job of the century – machine learning, AI, etc.” But in the end, if you don't have data, and if it's not well organized – you don’t take good care of the pipelines and the data – data is the key for data science. So that's why they just ask “Oh, yeah, I need a professional to handle these parts.”

11:56

Alexey

**To summarize what I heard from you – the first thing is that there is this balance between technology and business. You see more business in data science roles compared to data engineering roles. And the second thing is data science is pretty much still hyped – you see a lot more applications for data science roles, but for the engineering positions you receive fewer applications at the moment, so there is less competition. Is that right?**

12:27

Nicolas

Yeah. And the candidates know a bit less about data engineering than data science as well. Because as you said, you have all this storytelling and communication. Especially some companies that say, “Oh, yeah! We're doing machine learning with AI.” And in the end it’s just some ‘if and else’, [chuckles] they’re not very advanced models. So you also had these marketing things. It’s the same for schools and universities, “Yeah! We have a brand new data science degree!” So they kind of play with this.

# A spike in interest for data engineering roles

13:14

Alexey

**Have you observed a spike of interest in data engineering roles recently? I am judging from the blog posts that I see on the internet. For a year, maybe a bit longer, I've seen posts on Hacker News, and in general, Reddit and on social media, that you don't need data scientists and you need data engineers. So companies realize that data engineers are actually needed – they are in demand – and more people learn about this role this way. Have you seen a spike of interest in data engineering roles?**

13:50

Nicolas

Yeah. I would say that I definitely have. We've seen more and more content where people are sharing about what they're doing. For me, that's also a trend that the big tech companies started. Basically, the FANG companies were the first to process huge amounts of data and were able to process a lot of it and analyze a lot of data as well. In parallel, we’ve seen that there were more and more tools that were available in the markets – open source ones or proprietary ones – that were helping to process more to analyze more. This definitely also helped, I would say.

Then you have all the cloud computing parts, like the Hadoop ecosystem. And so we continue to have more and more tools to automate. Data engineering is progressing a lot, it seems, and even the data engineering job is changing as well. Before you were doing a lot of things manually, but for a certain amount of data, or if you have very complex data, that’s not viable and that’s why you have these ecosystems that are used a lot. You also have like this change of some work and some jobs when you have more automation and more optimization of the processes.

# The importance of recruiters having technical knowledge

16:00

Alexey

**I'm wondering, as a recruiter who recruits for data engineering roles, and in general, for technical roles – how much of this stuff do you need to know? You seem to know quite a lot already, because we're talking about quite technical things with you. So do you need to know things like what ETL is, what cloud computing is, what ARC, what Fling is, what Python is? You mentioned “It's not AI, it's a bunch of if/then statements.” As a recruiter, how much of this do you actually need to know to be successful?**

16:37

Nicolas

Yeah. Okay. First, I'd say it depends on the recruiter. For me, I'm passionate about technology. Each time I'm talking with someone like an engineer and have some stuff I don’t, I just always ask. I'm also just curious by nature. For me, it's important to know the concepts. For example, it helps to reduce the number of candidates who can ascend to a role like hiring manager without the relevant experience. For example, I know what cloud computing is – I know the big picture of how it works, but more on the high level. If you ask me exactly what the inner details are – I don't know, because this is not my job. But you need to understand the big picture.

It really helps me to spot very quickly, if someone’s experience is relevant for the job or for the project. It also helps me, for example, when I choose some resumes, I'd say, “Oh, I'm not sure this candidate would fit or match in this role, or this part of the tech organization, but this candidate might be interesting for another one.” So I would say yes, it's better to know. Also, you have some credibility as well. Because imagine if you're an engineer and you talk to a recruiter who doesn't know anything – even the basics. So you also have this image and credibility. That is also important, in my opinion.

# The main challenges of hiring data engineers

18:47

Alexey

**In your opinion, what are the main difficulties? What are the main challenges of hiring data engineers?**

18:56

Nicolas

So, as I mentioned before, there's no formal training for it – no official diplomas. If you're looking for someone who is a senior, generally, you're gonna have candidates and engineers who are coming from software engineering, BI, or from some other roles. I've seen some engineers that come from data science, and they realized after a couple of years, “Oh, yeah. Actually, I like the data piece more than the rest.” I would say that's one of the challenges.

I think the second one is pretty classic – in the market, it's very high demand. You have a lot of jobs as well that are close to data engineering, but that are not data engineering in the sense of what data engineers are working on right now. Sometimes you can have someone that is very senior, but hasn't worked on the classic data engineering problems that you can have. For me, I would say that’s one of the difficulties. So you really have to see and understand what the candidate is doing and what they want to do in the future.

20:57

Alexey

**I imagine that you get a bunch of applications – or you reach out to a bunch of people – who do not yet have the title of data engineer in their portfolio, like a data scientist, BI engineer, software engineer. It seems like they're doing something irrelevant, but you need to find out if this is actually relevant. I imagine there are already a lot of software engineers that are building data pipelines – they just don't know that they're doing data engineering.**

21:26

Nicolas

Yeah, exactly. I mean, you can have that with data science as well. You can have people who have data scientist as a title, but they are only doing R or MATLAB, for example, or R and SQL. But yeah, that's one of the reasons. I would also say that, although the job title is important, to me, the most important thing is really what you are doing on the job and the kind of projects you are working on. I've seen some people with a software engineering title and they've been working on Hadoop, or a combo of Hadoop, Spark, and Scala stuff. Yeah, it is software engineering, but you could have called yourself a data engineer.

It's the same when you have some people who call themselves a BI engineer, but they are doing data engineering. So, hopefully, the more we're going to talk about data engineering, the more training there is, the more blog posts there are, etc. I do hope that people will realize that “Oh, in the end, I'm doing data engineering.” I think there's a bit of branding still to be done.

# The difference in hiring junior, mid, and senior level data engineers

22:55

Alexey

**Do you think there are a lot of differences between hiring junior data engineers, middle level data engineers, and senior engineers? [cross-talk]**

23:07

Nicolas

Yes. Definitely. I would say that junior engineers are very task-oriented. When you start working as a data engineer and join a team, they will say, “Okay, we have these projects and this task –and you're gonna do it.” When you move to someone who's an intermediate level, they are not only task-oriented, but they are more proactive in the sense that they have a pretty good understanding of programming, they are able to make some design decisions, and they can manage some project with ambiguity, when you have some complexity. In the end, they start to take on their own projects. It really also depends on the size of the company you work for, the type of the company you work for. They might have some focus on designing new products or to improve some system flows, for example.

For the senior level – when you're a senior data engineer, of course, you have the skills – you should have expert technical expertise. This, combined with the number of years of experience, you're basically able to manage a bunch of products. You have better reflexes and know what to do depending on the case or on the technical situation. Basically with the multiplication of the trial and the error you’ve made like, “Oh yeah. I remember that pretty well. I already did that.” Or like, “Here, I did that pretty poorly.” And of course, to finish – you have the influence. You have influence on the technical decision, also you have influence on the way of doing things, and influence over the less senior data engineers. So this is also like a grower in the influence zone, I would say.

25:53

Alexey

**When you actually recruit them – when they go through the recruitment process – I imagine at the beginning, they have a call with you (the recruiter) at the initial first stage of the interview. I imagine that for each of these levels, you would have a different approach. Right? You said the seniors are more task oriented – then maybe you would just ask about the things they did, the technologies they know.**

**Then maybe for the intermediate level, you would maybe ask about cases when they showed this proactiveness that you talked about – when they made a design decision. Then for a senior, you would ask them how they showed this influence that you talk about? Is this a correct assessment?**

26:38

Nicolas

Yeah. So the goal in the recruitment process – you have a framework. The process is the same but, of course, you do not expect the same whether you're talking to a junior or a senior engineer. For junior candidates, yes. What I've seen in general, in terms of recruitment process, you have different steps. Of course, you always have an intro call with a recruiter. Here, it's more about getting to know each other like, “What are you working on right now?” What the company I’m recruiting for is doing, etc.

Then, usually, it depends on companies, but you have a first discussion with someone from the data engineering team. Here, it's more about talking a bit more in detail on the candidate’s current project. After that, you have this mix of technical interviews, during which you have a coding interview. Of course, the coding interview is data oriented.

The last one is certainly a bit more of a practical, analytical exercise. For example, when you start as a junior data engineer and you talk to someone like the hiring manager, for example, something that is important is also to care about the business. Because as a data engineer, you talk with different kinds of stakeholders and you also have to understand the business. Of course, if you are more senior, you will be able – on any technical question or discussion – to be able to say, “Why would you do it this way and not that way? What would be the drawbacks and what would be the benefits?”

You need to be able to explain the different trade-offs – trade-offs, in terms of time, money, and performance as well. So the more senior you are and the more you tackle all these problems, you can say, “Oh, for this kind of problem, I would go for this solution,” and explain why this solution. But also to be able to say, “Okay, this solution might work, but you might have some drawbacks and some bottlenecks.” So you have to be aware of all this. Of course, it is not something that you can necessarily ask of someone who is just starting the job, because the goal is to multiply the technical challenges that you find during your career. The more you tackle them and the better reflexes you have like, “Oh, yeah. I already had a similar problem. Now I know what to do.” So basically, what we expect from junior, intermediate, or senior has to reflect on what we ask during the recruitment process. So you have a parallel between the two.

# Things recruiters look for in people who switch to a data engineering role

30:39

Alexey

**There is a related question. We talked about different levels – talking about people who are switching to data engineering. What do you look for in these people? I think you did mention one thing – for people who are just starting their career in data engineering, they need to care about the business and do some research about the domain of the company that they’re interviewing for, right? Are there other things you look for in these candidates who are just getting started in data engineering?**

31:16

Nicolas

Yeah, exactly. There’s several things. First, I would say that it helps a lot if you have done internships, for example. That's a good way to start. Now, there are a lot of online trainings coming up in resumes, whether it's on their own, with different technologies – the basics and data engineering use cases. This is also a good start. On technical skills, I don't need someone who's going to put on their resume, like 40 or 50 different skills. I prefer to have a reduced number of technologies and tools that were used – that you really used. If someone asked you a question in an interview about this or this tool – you should be able to answer.

Basically, on the resume for data engineering, of course, you have SQL, Python. I would say, this is the bare minimum. Also, in terms of projects, if I put myself in the shoes of candidates, it's really important to have a balance – whether it’s your resume or LinkedIn – to have the right balance between, no details and too much information. Because recruiters, we're kind of lazy [chuckles] so we like to read quickly – to go straight to the point. I do check for projects, whether it's an internship or a project that you've done on your own. Also, a thing that is important – if you’ve done an internship, whether it's a startup or a bigger company, post about what kind of problems and what kind of data you've been dealing with, as well. In general, I would say (except some companies) the data engineering problems look very similar.

The exception is when you have a massive amount of data – that’s where it complicates things and it's a bit more specific. For example, if you go to companies like Criteo, for example, the amount of data is huge. Here it was pretty specific. Yeah, but here, for example, at Onfido, we have less data – but privacy is at the core of the data. Privacy and security in general is at the core of the data. If there's anything specific as well, that's the main thing that I'm looking at. Generally, I don't pay that much attention to the title. [laughs] Maybe I'm one of the few. But yeah, I'd say be precise and have some details and say, “Okay, the company is doing this. I've worked on these projects. I've used this tool. That was the problem and this was the outcome.”

35:07

Alexey

**Yeah, so speaking of titles, you just mentioned that you don't really care about them. But I imagine that right now, many data scientists, many software engineers, BI engineers, data analysts, see this interest in data engineering roles. They see this demand for data engineering roles and they want to switch, right? For these people, who may already have several years of experience – maybe even more than five years working in IT in these roles – they are not really starting from scratch compared to somebody who is fresh out of university.**

**Do you think these people should also apply for junior positions – let's say somebody who currently works as a data scientist. Or should they go directly to the usual intermediate or senior data engineer roles?**

36:01

Nicolas

If you're someone who has a lot of years of experience, like backend, full stack or BI engineering, I think you can start with a junior role. To me the thing that is very important when you apply is to see how the team is. Because it happens, once you're just starting to work at a company and have like 10 years experience that’s not necessarily related to data engineering, but you will be the one handling all of the data piece, it might be complicated. Most companies, like startups and ones that don’t have a particularly huge amount of data or a privacy focus, the projects and the way data engineering is done doesn't change that much, it seems. You’ve got to start somewhere, but I would say the first thing is really to go and check on the internet how the team handles their cases and projects in order to start having your own reflexes.

So then you can say “Oh, yeah – for this kind of problem, I've already tried some things. I've seen some tutorials and videos.” I saw that you have a webinar coming in May. So hopefully this will be useful to you to get more insights. I would say when you just go for data engineering, there are three things you have to keep in mind. Now, data engineering is Python, mostly – so get yourself into Python. If you're more of a coder just check on SQL you can see all the different tools that you can have like Tableau, Looker and all those things. And also care about the business, because data engineering is not only “Oh, yeah – I'm just coding or doing some tech stuff.” You're also going to talk with data analysts and you're gonna talk with BI people, analysts, etc. since you serve the business.

That will be my advice – SQL, Python, the basics of data engineering, and also care about the business, because you have an impact as a data engineer on the business. After you, the data is used by data scientists, business analysts, and even sales. You have to always have in your mind that these people will rely on you.

# The importance of knowing cloud tools

39:41

Alexey

**How important is it for data engineers to know cloud tools like AWS, Google Cloud Platform, and others? Most of the jobs, at least from what I see in Berlin, require that to some extent. For the rest of Europe, is that also what you see?**

40:06

Nicolas

Generally, for the companies I've worked for, we were mostly tech-agnostic. For example, for cloud, if the company is using GCP and you only know AWS –that's fine. You know how cloud computing works and I think that's the most important thing. It's the same if you use Looker and not Tableau – okay, it's different, but there’s some stuff that is similar as well. For me, you don't have to know all of the technologies – you have to understand how they are used and why. Then you just have a bunch of differences with the different features that they have. For me, it's not really important.

But, of course, if you say on your resume, “Oh, yeah – I’m an expert with Tableau. I know Tableau.” Maybe I’ll ask you a specific question about Tableau. So you should be able to answer that. Just don't pretend you’re an expert and that you've used all the tools, etc. No one is super human. Or if you are, at least hide it [chuckles]. So for me, it's not that important, but if you have used similar ones – you *really* used them and you have knowledge about them – this is the most important thing, really.

# The importance of knowing infrastructure tools

41:50

Alexey

**Then the question goes on, “How important is it to know infrastructure tools?” By this, I think they mean tools like Kubernetes or setting up databases, or whatever we use for data pipelines, like Kubernetes, Terraform. Is it something you also look for in candidates or is this secondary?**

42:22

Nicolas

It really depends on your organization. So here, for example, at Onfido we do have DevOps engineers that are specifically working on the cloud platform. If you join a smaller company as a data engineer – if you don't have DevOps, the data engineers might have a broader scope. If you're targeting midsize to large companies, I'm sure this is very important to know. Or at least to be aware of what it is and what it is used for – that's the main thing, really. Generally, now most of the organizations have DevOps folks who are working with this. Then after, it really depends on the synergy between how DevOps and data engineers are working together. Here, it also depends on the companies.

43:39

Alexey

**It's actually not different for OLX – the company where I work. Because we do have DevOps (we don't call them DevOps) but there are people who will take care of the platform stuff, so then it's easier for us data scientists and engineers to just use these things.**

43:57

Nicolas

Now it’s crazy because you also have machine learning Ops, for example, who are like the DevOps for ML. But now, we have also seen a sort of split – because in some organizations, you have data engineers, but you have like BI engineers and analytics engineers. So it depends also on the organization, because it's all organization. You're just called a data engineer, but you’re doing a bit of all three. It also depends on the companies and how they split and organize themselves.

# Preparing for the interview

44:35

Alexey

**Yeah. Another question, “What would you recommend that job applicants do before talking to a recruiter or a hiring manager?”**

44:43

Nicolas

Yeah. Okay, I'm gonna repeat myself again [chuckles], but yeah. Care about the business. As a recruiter, I would say I always plan the intro call with candidates – whether they applied or if I reach out to them. I never call by surprise. I've seen this – honestly, this is really bad – I've talked to someone who had absolutely no clue about what the company was doing. How to prepare? See and check on the business and the product. Of course, you don't have to know perfectly about the business or the products. But at least understand the problem that the company is trying to solve. After, if you have any specific questions about the product or the business, the recruiter will be there to give you more details and more insights.

Personally, I also ask the same questions each time, such as , “How did you hear about the company?” So, if they heard about the company before? This is also useful for the data engineering process, but you have to be able to explain the projects you've worked on – currently, or in the past – but you have to be able to explain it to a non-technical person. Maybe I might be a bit more technical than some recruiters, but that's also something that is very important to train. Just train talking a bit more about yourself, like, “This is what I've done. This is the project I've worked on. This was the challenge.” And also say why you applied. Or if it was a reach out – why are we talking right now?

If you have any specific career explorations, things that you want to learn, etc. This is important to share. There's really no very technical discussion with a recruiter. It's pretty high level, but some candidates might not be that comfortable talking about themselves – what they've done and what they would like to do.

47:43

Alexey

**I've made this mistake of not preparing well for interviews. This strategy of just spraying and praying is what I did like a couple of years ago. I would just go to LinkedIn and other websites and just apply to everyone. Standard cover letter – the same CV. Then, of course, recruiters were answering me. Then I had a call with one of the recruiters who asked me as the first thing, “Okay, tell us what you know about us?” And they was like… [cross-talk]**

48:13

Nicolas

Exactly. I always ask this question. [laughs] I always ask, “What do you know about the company? Just tell me everything that you know, and if there's something that is not true. Then I will complete the gap and give you more details.” Because also, especially as a data engineer, if you apply to a company where the business or the product looks particularly interesting to you – this is a huge plus. When you're going to start talking with a data engineer manager, for example, and you say, “Oh, yeah – I've used your product!” Or, “I think the product is pretty cool,” etc. It shows that you do care about the business. In the end, generally speaking, it's positive.

49:05

Alexey

**It's a positive thing, definitely. The end of that story wasn't very positive because I asked, “Okay, can you remind me of the company’s name?” [laughs] That was already a bad thing. After she told me the name, I thought, “Sorry, I don't remember what you actually do.” Then, of course, needless to say, they didn't call me. They didn't write back after that interview. For me, the lesson there was “Okay, maybe instead of just applying to everything I see, maybe it should take a little bit of time to actually care and read about companies.”**

49:37

Nicolas

Yeah, and target the companies that you think are interesting, whether you like the business or the product, or the kind of data. Are you seeking a company where you have big amounts of data? Or maybe less data, but a more privacy-oriented company, for example. Maybe you want to deal with data from healthcare, ecommerce, financial, etc. So yeah, if you have any specific interest in one of the domains, you can also have targets there. But also, a thing that can help as well is to network. There are all these communities – go and listen to people that are doing data engineering, read articles, and then you're going to reinforce your own opinion on what kind of problems you find super interesting. Then you can target the right companies.

# The importance of a formal education

50:45

Alexey

**What would you say about people without a formal computer science degree? Would you hire somebody without a formal degree, but someone that has a set of data engineering projects?**

50:57

Nicolas

Yeah, so I'm gonna be very clear. I don't care if you have a diploma or not, as long as you have the skills and the experience. As long as you learned what you need to. I've hired some self-taught engineers. I remember, I think it was a couple of years ago, for a company I've hired so someone who has a generic engineering degree and studied as a data analyst. Then this person got interested in more of the data piece and kind of trained herself. So you may have a diploma or a formal education that is not exactly computer science – that's one of the things that I find really cool about computer science and tech, in general.

Generally it’s not that focused on “Oh, this person didn't graduate from this or this university.” “Oh, they just have a bachelor's degree.” I mean, you're in high demand if you have the skills and you show to everyone that you've learned, and you keep learning. That's also something very important. Just keep learning. See, if you spot any trends, any new tools. You should be aware. Because you can be stuck in old technologies that you used 10 years ago – data science moves fast. There's always new stuff. So yeah –the degree doesn't matter, but just be aware of what the trends are in the market on the technology side, and follow that trend.

52:52

Alexey

**For me, personally, the only institution that was interested in my degree was the foreign authority in Germany. To get a work permit – to get a visa – there are some requirements foreigners need to pass in order to get the work permit. And that was the only time I actually needed my degree. Nobody else cared about that.**

53:19

Nicolas

Yeah. For me, I've never been a fan of a five years minimum experience in this or this technology and in this role. Because you can have a very senior person with three years experience. The number of years of experience doesn't matter. The formal education doesn't matter to me as much. The only thing I'm going to focus on is – skills, experience, and the projects you've been working on. If you had a diploma in finance back in the day, I don't read that. I just look at the last five years and what you've done. And if it's interesting, okay, then we'll talk. That's why, when you have a resume – give some details. Not too much, but get straight to the point.

# The importance having a project portfolio

54:25

Alexey

**So, you mentioned projects like 10 times by now. Do you maybe remember some of the projects that really stood out, where you thought “Wow! Cool! This candidate is definitely passing my screen into the next step.”**

54:41

Nicolas

Yeah. For example, if you have some kind of project – [laughs] I’m not technical enough to explain – but, if you say that, “I've been hired at this startup and I was one of the first data engineers. We started to work on building the first pipelines.” or, for example, “We've built certain data pipelines or data sets for a very specific business need,” or something like, “Oh, yeah, with GDPR, we had to remodel and change the system workflow,” for example. Or maybe “We are dealing with private data, so I had to put in place some data deletion systems.” This is some stuff that is pretty cool.

55:53

Alexey

**So it's not about the portfolio. It's not about your public GitHub profile with all the projects you’ve worked on – it's more about what projects you can talk about to the recruiter and explain it concisely in a way that any non-technical person would understand what the project is about. Right? So it's more about having these stories prepared for the interview, rather than published to GitHub. Do you actually look at the GitHub profiles of candidates?**

56:22

Nicolas

I would say when candidates share the link – yeah, I have a quick look. I do believe that my colleagues on the data engineering side definitely have a look, when you're applying as an engineer. But similarly, there's no obligation to share anything – you just share what you want to share. I mean, not everyone has a passion for it and wants to spend all their weekends on open source or doing their own projects. You know, people have lives, so you also have to find the right balance.

In the end it is the same for resumes – anything that you think is worth sharing, please share. That's the only thing. So if you say that, “Okay, I'm not a data engineer yet, but I have done this online certification, I've done this one, etc. I did this online degree, and I worked on this project.” So as long as you're able to talk about it and go into the details to someone from engineering after the initial interview, you should put that in your resume. But you should be able to talk about it in detail. Because sometimes it happens like, “Oh, yeah, I've worked on this project.” But when the interviewer asks for elaboration, they just say, “Oh, but no. In the end, there were four people doing this.” And the candidate just touches on the spots of the project that they worked on specifically.

# How your current domain influence the interview

58:05

Alexey

**There is a question from Dan. The question is about switching from one industry to another. I’m wondering, do you actually look at the industry where the candidate works in? Or do you care mostly about “Okay, this person is already a data engineer or knows some data engineer,” and then only after that you look at the industry where they work?**

58:30

Nicolas

No, I am not specifically looking for someone who's specifically working in one industry or the other. Some industries can be a bit more interesting, however. For example, if you're working with some regulated companies, like banks or trading platforms, etc. Or if you're dealing with private data – so if you're working in health care or insurance, for example. This can be a specific set of skills, or domain knowledge that can be interesting. But otherwise, no – I just look for the projects. The industry doesn’t matter, unless it's very specific.

# Conclusion

59:25

Alexey

**Yeah. William said that he really liked our sweaters.**

59:31

Nicolas

Sorry? [cross-talk] Yeah. We didn't know and I think that this is the first thing that we talked to each other about when we connected before the event. [laughs] Yeah, definitely not on purpose.

59:47

Alexey

**Okay. I don't think we have time for more questions. There are still seven questions. Apologies. Yeah, I think we partly covered some of them. Maybe now word for word, but I think maybe half. [cross-talk]**

59:59

Nicolas

If that's any other questions left, there's my LinkedIn or Twitter – you can send me any questions. Another thing I would advise – I think you have Alicia on podcast as well – she shared a lot of very good advice about the resume and how to source a job, etc. So you should have a listen to the event and the webinar next month, if you really want to dive deeper on the technical side, or actually how I'm doing it in terms of skills. It should be useful. I've done a bit of a trailer for the webinar. [chuckles]

60:59

Alexey

**[laughs] I’m the one who should be doing this. So thanks a lot for doing that.**

61:03

Nicolas

Yeah, because I kind of feel that there’s some in-between in terms of the things that I have said. So if you listen to Alicia for more on the HR side. Also, I don't remember the name – Jeff, I think. Yeah. So it's more concrete. So, with the three of us – I hope it will help you.

61:32

Alexey

**Thanks a lot. That was amazing.**

61:34

Nicolas

Thank you. Thanks, everyone, for listening to me.

61:38

Alexey

Yeah, for everyone who is going to have Easter holidays – enjoy your holidays. Yeah, it was nice talking to you. Thanks, everyone for tuning in, for asking questions. That was amazing. Have a great rest of your day.

61:52

Nicolas

Yeah. Thank you.