1:34

Alexey

**This week, we'll talk about diversity and leadership in data science and AI. We have a special guest today, Dania. Dania is a co-founder and director at the AI Guild, where she works with companies scaling data analytics and machine learning. She has been a senior expert and mathematician in the field since 2012, doing machine learning for predictive analytics and focusing on marketing use cases. Welcome to today's interview, Dania.**

2:01

Dania

Thank you. Thank you very much, Alexey, for inviting me. As you mentioned, I have known you for some time and this is the first time that I am on your channel, so it's pretty cool.

2:11

Alexey

**Yeah. I've been on your channel a couple of times – at least two, I think. It was about time I returned the favor. It should have been done a long time ago. [chuckles] Sorry it took so long. The questions for today's interview were prepared by Johanna Bayer. Thanks, Johanna, for the help. Let's start.**

# Dania’s background

2:32

Alexey

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

2:43

Dania

Yes. I studied Applied Maths for my Bachelor’s. When I finished my studies, I moved from my hometown to Rio de Janeiro (this is all back in Brazil, where I was born) and I worked three years as a marketing analyst. Also, at the same time, I was doing a Master's in computer science. When I finished my Master's, this was 2015, I did my thesis in recommendation systems, motivated by the use cases I saw in marketing with personalization. Also because at the time, there was this big data processing framework called Spark, (maybe you know it). At the time, it was Spark 1.0 replacing Hadoop. I basically wrote a thesis comparing the implementation with Spark and Hadoop.

3:34

Alexey

**Fun times.**

3:36

Dania

Yeah. At this point, I was finishing my Master's, and I was thinking about working abroad. It happened that by chance, I got approached via LinkedIn for a job as a data scientist in Berlin. It was a perfect match. They were looking for someone with my experience exactly – working with data and predictive modeling for customer behavior analysis. They offered me the job, they sponsored my visa, and then in September 2015, I moved to Berlin.

The first three years of working in Berlin, I was in fast paced environments, international environments, startups, also with smaller data teams, which meant that even though my official job title was data scientist, I did a wide range of different tasks. I did data engineering jobs, connecting to my previous knowledge with Spark, but I also worked on analysis and I built Tableau dashboards. For sure, I did a lot of machine learning, mostly for forecasting and prediction tasks. It was a great time to learn all those different skills.

I think that helped me build a good foundation in the end-to-end data science work. Also, it was good for me to understand what my strengths were. I enjoyed a lot of this. At the time, I didn't quite plan to move to Berlin specifically, so I was dealing with these personal challenges like learning German and understanding how life works here in Germany. But it was all about discoveries, I would say, at the beginning of my career.

5:19

Alexey

**It's interesting how it's a bit different now with the data scientist title. When I started my career “data scientist” meant many different things. I also got to do analytics, data engineering, machine learning (obviously). But now, it's more focused, I guess. Maybe at startups data scientists might still do all these things, but I think at bigger companies – we have machine learning engineers, we have data engineers, we have data scientists, we have data analysts. I think it's more focused right now. It's a bit harder to be a generalist right now.**

5:58

Dania

Yes, I agree. I think that at the beginning, it was also easier to be a generalist because there were not so many tools like we have now. Now, with the tools, it's easier to get started in a specific area, like data engineering, for example. Then from there, you can really develop your expertise and go deep into the areas of engineering instead of going into deep learning, for example, which would be very different with different tools.

6:28

Alexey

**So you worked with startups and then you did something else, right?**

6:32

Dania

Yes. Then I started to understand what I wanted to do, and I really wanted to focus on machine learning. Also, given my background in applied math, I really enjoyed the modeling aspect. I moved to work in a German company that was more structured, but then I also helped a lot to create the definition of the role. I think this is also one of the things I saw during my career in the past years – the evolution of the field also translated somehow in the evolution of my own personal career and what I could contribute to the organizations I was working for to come up with those better defined rules, understand what the tools that the field was starting to use were and make it a standard tender. For example, now we see that there is consolidation of using Cloud tools.

Even for deployment, we see that there are a lot of companies using the same tools, like Docker and Kubernetes. This kind of thing started to come up as I changed to another job and then started implementing this. I think that this was the time that I also started to learn that I enjoyed teaching a lot, because I was supporting my junior colleagues in growing to their roles and to understand what the scope of the projects was and how we could split the tasks based on the strength of each one on the team. I was also teaching at a data science boot camp at the time. I did this besides my full time job. I also did some volunteer work at Data Science for Good Berlin, which helped me to get to know other people working in data science, to exchange work practices, and to really understand in which direction things were developing.

8:28

Alexey

**You said you worked at a boot camp as an instructor?**

8:32

Dania

Yes, exactly.

8:33

Alexey

**I wasn’t sure. I know your profile on LinkedIn and I remember that you were an instructor. I just didn't hear this time if you were an instructor or a student. Was it first that you started as a student and then became an instructor? Or was it immediately?**

8:49

Dania

No, I was just an instructor. I mainly did a SQL crash course for weekends. I did this for two and a half years. I also supported other classes like Git or Bash Scripts, but the main one that I was teaching was always SQL because it's also the first thing I learned at my first job as soon as I graduated. I was a marketing analyst and the job was basically to get data from SQL and build reports or build analyses or do simple regressions. I felt like this was not at all covered in courses at universities. Now you have a lot of online courses, but back in 2012, Coursera was not a thing yet.

9:33

Alexey

**I think when Coursera started… I don't remember any SQL courses. I think there are now, but back then I think you had to learn on the job. You also mentioned Git and Bash scripting. I think this is what many new data scientists struggle with and you were helping them with these things.**

9:53

Dania

Yeah, I think those are things you learn on the job, but you could be prepared. I also learned those on the job. When I started as an analyst, I didn't work with developers, but as soon as I started working as a data scientist, I worked a lot with backend developers. They were writing proper code and they were doing code review and I was like, “Okay, I’ve never done this before.” Even when I was at university, I learned how to do all of that in theory, but you work on your thesis basically on your own. Maybe your professors check in on your stuff, but it's not like when you're doing collaborative work with a team, where everyone is developing in the same base code. I learned the importance of that.

I was lucky that I had very good colleagues that had a lot of patience with me. I picked up the skills and then, as soon as I saw the importance of it, I was like “Okay, we need to spread this knowledge. Maybe even the awareness that this is important is not in people's heads.” It kind of helps you be faster and it helps you also adapt to the new workplace if you already know the tools that they're using. And those are quite standard tools.

# Founding the AI Guild

11:08

Alexey

**I want to ask you about the AI Guild, but I'm wondering if we're missing anything before you started that?**

11:17

Dania

Yeah, I think we have a good link because that's when I was doing Data Science for Social Good and when I was teaching at the bootcamp – it was when I started to get to know more people working in the field. I started learning that all the challenges that I had in my work was not only me, it was not only my company. There were some common struggles that we shared. One easy or very straightforward thing is that there are not a lot of women in the field, or at least I didn't know a lot of women.

I had a few colleagues, but then I had questions like, “Can I find more women working in the field? Where are they? Let’s reach out to other networks and see if we can learn how to support one another – support more women entering the field.” All of this kind of started this community or this network idea. We just got together. For example, when we started with the women group, we started getting together in a company where one of us worked and we had sessions where we were just talking about our stories and what it is like to be a woman in that particular company, what kind of tips you can share, etc.

Fast forward to 2018, that’s when we really broadened the circle. We found more people that wanted to work towards the same goal and to really embrace this aspect of gender diversity at this point. Then we started talking about other challenges in data science work. For example, we want to have more impact on business. There were many instances where we shared projects and proofs of concept, but they would not be used – they would not get deployed. There were many aspects involving all of this. The more that we shared about those challenges, the more we learned from each other's failures and also learned what we could do about it.

Then we started doing this as an official community. We did monthly dinners, initially, in Berlin. We were maybe 20-30 people getting together, but we did end in frequent waves. We would bring the same people every month and invited new people to join. We also started to understand that this came together as a support not only for the technical challenges, but also as career support. We kind of translated into this question of, “Okay, do we have different career paths? How do we grow in our own career?” The idea of the AI Guild community was to put people together and to find solutions for those challenges. My point, I think, was to create an environment that was welcoming, and one that allowed us to talk about our experiences, because I didn't have a solution, or I don't have a solution yet – but I think that if we put our minds together and discuss the topic, we can move forward. It was really about helping each other and helping our ecosystem grow.

We officially launched the AI Guild in May 2019. We created a logo, we launched the website and now our mission is really to advance AI adoption. That's the point – we want to talk about our good experiences but also about our bad experiences. People know that it's a space where they can ask questions and they can seek help, because other people in the community have been through similar things. We learn from each other, we grow together, and we hope that by sharing the lessons learned, it's also a way to fast track other people's careers.

15:17

Alexey

**You still have these dinners, right?**

15:19

Dania

Yes.

15:20

Alexey

**Every month?**

15:21

Dania

Yes. We started with the dinners and then we had COVID, so we went to online meetings. But since last summer, we went back to the dinners in person. Now we have grown outside Berlin – we are a global community. We have over 2000 people, but mostly based in Europe. Then it’s upon the members in the city to organize the dinner. For example, here in Berlin, I am one of the co-organizers. We get together with this idea of really networking and getting to know each other, and meeting every month so you gain trust in the other people that you meet.

16:03

Alexey

**Cool. I was at one of your events, which was during COVID times, which is when we got to know each other. I think it was exactly this, where people were talking about good and bad experiences. In Particular, you mentioned the link between a POC and deployment. I think this was one of the topics that we discussed back then. So you do that and you also mentioned another thing.**

**You're also doing career sessions. You talk about career challenges, like going from academia to industry, right? That's one of the things you cover? [Dania agrees] I also know that you did a conference last year. Is that right?**

# Datalift Summit

16:45

Dania

Yes. There's a lot going on. Yes. The monthly dinners were how we started. We always had the idea to get people together in a bigger group. We have the local dinners, but what about one big event? One where everyone travels to Berlin, which is where we started, and gets to know each other? We finally managed to do it for the first time last June. It is the Datalift Summit. It was really, to me at least, a big surprise. At the same time that we wanted to do it, since we started in 2019, we were not sure about how this was going to work. Especially considering that it was just post-COVID – online events became the norm and it was comfortable. You get to know people from doing these kinds of calls online or watching them.

17:37

Alexey

**You never met in person, right? We should fix that. [chuckles]**

17:39

Dania

Yeah, we were like, “Do people really want to meet in person? I don't know. Maybe we're still a bit afraid.” People are starting to get shots for the protection of everyone. We were like, “Okay. Let's do it in summer, because then we can do it in more open spaces. Maybe it's safer. Maybe by then more people get access to the vaccine.” And yeah – we sold out. We had 300 tickets. We sold out all the tickets. It was really amazing to see how the community was looking forward to being together in the same space and meeting face-to-face. It was a huge learning experience for me in terms of how to organize this. I had never organized anything in-person. But I really had an easy time finding speakers, because in our community people really want to share what they have been through and their knowledge.

This was the easy part – finding a speaker was the easiest part. I had more than 50 speakers. We were also not sure if people would want to join the event, but two months before the event, we were able to sell all the tickets. It was a really nice get-together – a cool atmosphere for people that were both entering the field, but over 40% of our audience was people in the mid-level of their careers – between years two and three. We also have a lot of people who have over five years of experience. Maybe they are even founders of their own startups. So there was a good match for people that wanted to get career advice and people that maybe are looking to expand their team.

19:23

Alexey

**Are you doing the Summit this year?**

19:27

Dania

Yes. We are doing it again this year in Berlin in June. Now I can do a plug. We still have cover speakers open until the end of this month – end of February 2023.

19:40

Alexey

**Yeah, so if somebody wants to speak – hurry up. [Dania agrees] I should also take a look at that.**

19:45

Dania

Yeah, exactly. You are also invited to present live in person.

# Coming up with meetup topics

19:51

Alexey

**Okay, cool. I want to go a little bit back to the time when you said that you noticed that there are not a lot of women in the field and you wanted to reach out to more women. You started organizing meetups in one of the companies where you worked, where you had sessions where you talked about different challenges. I wanted to ask you, what did you discuss regarding these challenges? What were the topics? How did you come up with these topics?**

20:24

Dania

Yes. This is something that started as my own curiosity. I was kind of selfish – I wanted to find answers for myself, in my career. I think this is what everyone does, maybe not intentionally, but you look up to other people. You see what they have done and you think, “Okay, could I do the same if I want to be where this person is?” And I couldn't really find a woman that was successful in the field of data science around here in Berlin. It was not easy to find. Because if I could see this person, I would go up to them and ask them, “How did you do this? I'm going through this, do you have any tips?” That was the first thing that motivated me. How can I do it for myself? I didn't really find someone specifically, but I found a lot of other women that were also around here and they had different experiences.

For example, I was working as a full time data scientist. But there were people that were teaching, people that were volunteering, so that's also what I started to understand. You could do this besides your full-time job. There were other people that were freelancers and there were others that were founders. The first event that we did was really “career options”. That was the title, Career Options. I put together a panel where I was the interviewer. I had my own questions, so I created an event to ask them my own questions about the careers that they chose.

It was really to talk about, “What is it that you do? Why do you think that you chose this career?” We had someone doing research, someone doing freelance, someone working full time as a team lead. It was really about, “Tell us about what you do and why did you choose this career? What can you tell others, maybe the pros and cons of choosing this career?” It became a discussion. From that first one, we learned that there were a lot of other things that people wanted to know. We decided, “Okay, let's have a list of different topics, and then each month, we can do one of those topics. That's how it started. I really wanted answers for myself.

22:43

Alexey

**That's a very nice way to find answers, right? You organize a panel and then you find people who have answers, and you ask them.**

22:55

Dania

We were really happy to do this for other women because we don't see so many women in the field – maybe one or two, and then another person, and another one or two. With that, we got to 30. That was pretty good.

# Diversity in Berlin

23:10

Alexey

**Do you think the situation is better now in Berlin in terms of gender diversity?**

23:15

Dania

Yes, I do. I think at my last full-time job, we had a team that was 50/50. We had the same amount of men and women, for example. But yeah, I have been to job interviews in which I got interviewed by only men. I don't know. It feels different. I don't think it's only gender diversity. This is the main point – I think it's easy to see – but what I think is also unique here in Berlin is the internationality. We have people from different countries that live here together.

Especially in startups, people come to Berlin to work here and the language is English, but you can hear people maybe speaking Spanish in one corner, people speaking Russian in another corner. And we're all here. I think this creates a very welcoming environment, where you don't feel like you're the outsider – everyone is an outsider and we're all together in the same boat.

24:11

Alexey

**That's the beauty of Berlin. You can feel at home, even though it's technically not your home. [Dania agrees] I guess one thing is, like you said, the situation improved and you had 50/50 gender representation at one of your last companies, but maybe because this is how you chose companies? Could this be the case?**

24:36

Dania

For sure, yes. As I mentioned, I had been to interviews in which I only had male people interviewing me. There was one that was really strange. This was back in the time that you had to go to the company to interview and all the people that I saw there were nonfemales, and I was like, “Do they even have a women's bathroom? Because there's only guys here.” But yeah… I think this has to do not only with the company that I chose, but also maybe how the company positioned itself. Maybe this is dependent on your gender or your background or nationality, but also the culture, or the work environment, the atmosphere itself. That could be more welcoming to people that have different ways of thinking. Diversity is also in this way. For data science, we have diversity of backgrounds, like people that study economics or computer science or psychology can be working as data scientists. But also there’s different ways of thinking.

# Other types of diversity besides gender

25:48

Alexey

**So, “diversity” here means many things. Gender diversity is one visible aspect, but there is also diversity in nationality – we all come from different places in the world. And then there’s also background diversity – some people come from physics, mathematics, some people come from computer science, some people come from economics, some people come from social sciences, etc. and this is another aspect of diversity. Are there other aspects? I guess these are the main ones, right?**

26:19

Dania

Yeah, I think those are the main ones. There are other aspects like neurodiversity. But yeah, those are more specific topics, or even more difficult to address.

26:32

Alexey

**What is that?**

26:34

Dania

Neurodiversity is for people that are different in ways of thinking. They could be, for example, introverts or they could be in some spectrum. Yeah.

26:45

Alexey

**I see. There are personality types, right?**

26:49

Dania

Yeah – different ways to communicate or different ways that they are motivated to do work, or even that they communicate to others that might not be the norm, or what we know as the norm.

# The pitfalls of lacking diversity

26:59

Alexey

**I'm wondering, what are the pitfalls? Why can't I just go to the University of Berlin and hire all white dudes from the computer science department, from the same group, to work on this? Just take all of them and have them work? Isn't this enough to have a successful company?**

27:19

Dania

Yeah, I think it could be enough at some point. I don't think that it is not successful. But I do think that there is a limitation when you do that, because you are basically building something for the world and the world is a diverse place. You're building something that addresses only one group – that is the group that built this. It's hard when you don't experience the world through the lenses of others, so that you don’t perceive what it is that they are facing and how they understand the world – what challenges they have and what solutions they would enjoy.

That is one aspect. But also, if you really think of it coldly, as a company that is trying to sell more and make more money, then you want to broaden your audience. On the other hand, you also don't want to exclude anyone. You're basically missing the business opportunity when you just do something for a specific group. You’re doing something from a specific group that addresses only one specific group.

28:24

Alexey

**That's the main advantage of diversity, right? You usually don't build for a specific group, so you need to have different opinions – different voices in the team. Somebody can say, “Look, this is actually strange. Why did you do this?” And then you start a discussion and something happens at the end.**

28:47

Dania

Yes, exactly. Again, it's not only about having those people, like hiring them on paper, but really about creating this environment in which everyone can collaborate, where people feel that they are heard, that they can speak out, and then this exchange starts to happen. Then things start to come out. Because it's really hard for you to understand what other people are going through when you're not having their experience. For example, there is one reported thing in the book called Lean In, from the former COO of Facebook. She used to be like the right hand of Mark Zuckerberg and she's a woman.

Before she was ever pregnant, she writes in her book that they did not have any special parking spaces in the office for pregnant women. This never happened to go through her mind or through Mark's mind. That was it. And then she became pregnant and she was going to work normally and then she realized that she had her own spot because he was the COO – the second most important person in the company. But then other women were having to find a parking spot wherever (far away) and then walk all the way to the building, which meant more stress for them and also with the weight of the baby, it really becomes something that makes a difference in your day.

It got pointed out, because someone was late for a meeting or something. They said, “Yeah, I didn't want to take the stairs, so I had to wait for the elevator. I came from this other building, because my car was there,” and so on. And this led to this realization like, “Yeah, I have been through this and I am a woman. I should have known better.” But it never crossed her mind because it was not her experience. But someone was able to talk to her about it because she was also pregnant. They were like, “Yeah, I don't have a specific parking space that is for me, so that I don't have to walk so much.” It's like, “Okay, then we have to change it.”

Of course, as a COO, she could change the policy and she could make an amount of parking spaces available. But this is the kind of thing that will only come up when we talk about things and talk about our challenges and really point out “What about this? What about that?” Again, I don't think anyone has a right answer, but just by discussing this, we can figure out something that is probably more complete, or addresses more people.

# Creating an environment where people can safely share their experiences

31:24

Alexey

**How do you create this environment? An environment in which I can approach a COO and not be afraid of asking about these things, or feeling comfortable discussing these things with your colleagues, who are not from the same background as you? With males, for example. How do you do this, especially when there are a lot of males with a computer science background? It must be difficult.**

31:58

Dania

Yeah, I think it's not something that just happens. It's not something that happens overnight, as well. I do think it takes deliberate war work and it takes time. The first thing I would say is to communicate, or the leaders at least, should clearly say, “We want to hear from you.” They need to express that this is something that they're open to. Also, the best example, I believe, is an example by doing. As a leader, if you start sharing, then maybe others will feel comfortable sharing back. As a person that is from an underrepresented group in our field, I don't feel comfortable most of the time to just raise my hand and say things like, “This is wrong. You need to fix this.”

It's really about sharing and it's like, “This is how I experience this and this is how it makes me feel. And maybe there's a way that we can improve it. And maybe I have ideas, because I have been treated differently in different spaces. I could bring my good and bad experiences.” But also I don't think that demanding things is the right way to do it. It’s about really engaging in a conversation and, specifically, if you are in a position of power, to do it yourself and make sure that people know that you are open to this. I think it may start with one or two people, but as long as new people join and see that this is the atmosphere, then they won't have this fear from the beginning.

# How the AI Guild helps organizations become more diverse

33:43

Alexey

**You told us the story of how the AI Guild started. You had these meetups, these sessions, where you wanted to connect with other women in the field, and then eventually it grew to dinners and then the Guild itself. This was probably one of the very important aspects of the Guild. You wanted to make it diverse and you wanted to have different people in the community. Do you help companies recognize that and build such an environment, where everyone's opinion is welcome?**

34:21

Dania

Yes. It is something that we discuss in our community, like “How could we approach organizations?” As individuals, we can only do so much. We have our own limitations based on our roles inside organizations. That's when we decided – we had a survey from our members at the guild – how we could address this together with businesses. Most of the people decided to do a for-profit organization, which is consulting. This is the work that I do full time – supporting the community but also funding the community through B2B consulting. We don't do diversity-based consulting, but our focus is really about deployment, so machine learning to production, understanding companies and where they are in this journey, let’s say from proof of concept to production. That is not only on the technical aspects. We do some consulting based on the models or the data pipelines or the architecture.

One feedback we got from a company client is that they like doing this with us because we are diverse in the aspect of technology. We are not a vendor. We are not trying to push one specific solution – we are vendor-agnostic, we are independent consultants. In that way, we could explore a diversity of solutions. But then there is the aspect of needing people to implement all of this. You need to hire and you need to maybe structure a new team or expand a team you already have. That is the aspect where we can then talk more about this aspect of diversity. For example, one of the previous clients we had was a consulting company in Germany, for a very traditional area – in finance. That means, traditionally, it’s a lot of Germans and especially males.

We were doing recruitment and training for entry-level data rules. Our goal was to have a group that was at least 40% women. This is also our gender policy for the Datalift event – for example, the one we were doing in June. We say 40% because we also don't want to have only women. The point is to be diverse. We also had a goal to have at least 25% of people that were non-natives, even though one of the restrictions for the role is to speak fluent German or German at a proficient level, because of the nature of working in finance – having a lot of legislation and so on.

37:15

Alexey

**Must be a tricky one.**

37:17

Dania

Yes, we really had to look into different talent pools, let's say. Like you mentioned, maybe we don't go to just one university, we go to different universities that also have programs that are taught in English, and then people come to study in English, and then they learn German when they are here. In the end, we had very good results. We didn't really have the final say. In the end, the decision-maker was the company that was hiring them. We were only doing the recruitment and training. But we managed to find a pool of ten people in which five were women. From these ten people, eight more non-native, so we had mostly international representation there. I was really happy about that.

38:10

Alexey

**Okay. How did you approach this? I mean, this one is a tricky case – when you need to find people who are fluent in German in Berlin. I guess that’s not… [chuckles]**

38:24

Dania

That was not in Berlin. This was in Hamburg, but still in Germany. But yes, some people were not… the training happened in Hamburg and they had to be there for the training, but they didn't want to move to Hamburg. Maybe they were also in different places, because the work itself would be done remotely.

38:47

Alexey

**Hamburg is a pretty international city, too, right? [Dania agrees] Maybe not as cosmopolitan as Berlin, but still.**

# How the AI guild finds women in the fields of AI and data science

38:54

Alexey

**I'm wondering – you managed to hire five women and I know that it's not easy. I was on a meetup recently – PyData meetup. It was maybe 14 people and only two or three women. I don't remember. This particular sample is maybe biased, since not everyone goes to meetups. If you look at the general population, maybe things are better now than they were five years ago, but still – where do you find women if you want to have a diverse team?**

39:36

Dania

Yes. Again, this is something that you have to do intentionally. It won't just happen. What I can share is the policy we have for our events, which is that we invite women first and we invite women to be on stage. We make it visible to women that could be attending that there will be other women – at least the speaker. This is something that I have been through already. You go to a meetup because you're interested in the topic, and you arrive there and it's only a bunch of dudes. You're like, “Okay, who can I talk to?” Sometimes you don't want to be approached in the wrong way. It's tricky.

Also, it's hard if you're doing it for the first time and you don't know anyone. As a woman, I can say that it’s really good when you know that there's another woman going, so maybe you can ask a colleague, like, “I'm going. Let's go together.” Maybe if you know that the speaker is a woman, then you know that at least you can approach her towards the end. That helps. This is something that we also did for the training. Also, when I participated at the boot camp, I was hired by one of the women teaching, because they wanted to have more women applying.

Putting women in visibility roles gives visibility in general for anyone applying for that event, or for that initiative, in a way that they know that firstly, they will not be the only one. And secondly, it also sends the message that the organization cares about this, because they are making it visible. I think it's the same for all the other underrepresented groups, not only for women.

41:18

Alexey

**And this is something you did at the AI Guild from the very beginning? I guess at the beginning, it was even only women, right?**

41:26

Dania

Before it was called the AI Guild, we had this women’s meeting. But then when we called it AI Guild, I brought all the women from this women’s meeting, and that, in the beginning, made it really equal – 50/50. As we grew, it started to grow a lot more on the male side, so it became unbalanced. So the way to fix this or try to keep it up was that I intentionally invited women. Every woman I got to know in the field, I invited to the AI Guild personally. This is something I still do everywhere I go. I also try to attend other events from groups dedicated to women, for example, Women in Machine Learning and Data Science, or PyLadies. Those are safe spaces for women.

When you go there and you present them with the opportunity to speak, for example, they also have those communities for encouraging women to go to those visibility roles to really step up in their careers. So when you go there, you can tap into this pool that is being prepared for it and it becomes easier as well. But the policy is that we invite women to be speakers and we invite women first, so that we can fill some roles with women. Then it becomes easier when we invite more women to speak since they're already women speaking. It's like a snowball effect.

# Advice for people in underrepresented groups

42:55

Alexey

**Yeah, that's smart. I’m wondering – we're talking here not about gender diversity, but diversity in general. If somebody is a part of an underrepresented group and they get promoted, or take the next step in their career, how can they take on leadership roles? Do you have any suggestions or any advice for them?**

43:21

Dania

Yes. I think a good way, or at least one of the ways I did it – I'm still on the journey right now and I don't have all the answers – but one of the ways I found really helpful for me to grow in my career, is to find other people. Find a network. You don't have to do it alone – you are not alone. There are others there that maybe share the same challenges or have been through similar things, and you can learn from them. Also, once you have some experience, you can also help people that are in the beginning of their careers. There is always this exchange aspect that I think helps.

The other thing is to not be afraid to be visible. Maybe you go to the meetup, there is no other moment, and then you never go again. Then maybe next time, when you don't go, another one goes. So if you just keep on going or reach out, invite people, then it starts building this snowball effect. But you really have to step up and keep doing it until it grows. That's why I said it takes time and it's also not something that will just happen. You need to do something more, like invite others or even be a speaker so you are visible and others see you and come. I think those are the most practical things to share.

But also, on another level, more for organizations – maybe you want to look for organizations that already have leadership that is more diverse, or that are working towards making this visible for their brands. There are some companies that are visible for having a diverse or more collaborative workspace where you can find out about this. I believe those would be the best ones to start with.

# Organizing a welcoming environment and creating a code of conduct

45:13

Alexey

**One of the things you said is to not be afraid of being visible. I guess for that you need to have the right environment. Maybe you don't want to be visible in some environments. I guess this is something for the meetup organizers – to make sure that the environment is welcoming for people not to be afraid to be visible. And this is something you did in the AI Guild, right?**

45:36

Dania

This is something that, if you are an organizer, or if you're somehow the leader in the initiative, you should have a code of conduct. With the code of conduct, it's really about describing what the expected behavior is inside your initiative and what the unexpected behavior is and what the consequences of the unexpected behavior are.

This was one of the first things we did at the AI Guild because we really wanted to protect the environment in a way that it’s pleasant for anyone and people are also excited to go there, because you know that it's not only about people sharing the good parts, but it's also about sharing the bad parts and sharing what we learn. It becomes more real.

46:23

Alexey

**Maybe I'm wrong, but I see this code of conduct as like a privacy policy on websites – something that people do just because they have to? I might be wrong. I know, in your case, it was different because you thought of this from the very beginning. I'm not saying others do this as a checkmark, but I imagine that it can sometimes be like that. I’m guessing it's not enough just to have a code of conduct.**

46:50

Dania

You have to have the code of conduct and live the code of conduct. For example, when we thought about it, there is a famous one – the Berlin code of conduct. We started from this one and we took it as an example. It's published online and a lot of the meetups (even on meetup.com, for example) say that our event follows the Berlin code of conduct. The idea was to take from those examples and also from our own experiences, what we expect from people. When they, let’s say, go to an AI Guild dinner – what is unacceptable behavior and what are the consequences? And how can people report this behavior?

Then it becomes tricky when you are there at the meetup and then you see someone doing unacceptable behavior. What do you do? Now, as the community organizer or the leader, you really have to address it. You cannot run away from it. You cannot hide from it. By hiding from it, for one, you're giving permission to this unacceptable behavior. People that were there maybe won't want to join anymore, because they experienced this. But you're also saying that it's just like a checkbox. It happens, unfortunately. I have to say that this did happen.

We had to deal with unacceptable behavior and we also had to make clear that this was not acceptable and tell the person to never come again to our events. It's hard, because you also want to give people a second chance. Maybe people are not aware. There are some specific cases where you really have some values or have maybe some lines that cannot be crossed. In the end, what you are doing is really protecting the environment, so that people can keep enjoying this and leveraging the community for what it was made for, which is exchanging experiences and knowledge.

48:50

Alexey

**I guess it's really tricky. As an organizer, you need to understand, “Okay. Did this person really cross a lot of lines so they cannot show up anymore? Or maybe it's not a hopeless case and we just need to speak and explain that this is not acceptable?” How would you do this? Maybe you don't want to kick them out? Maybe they are just not aware? Because we are all coming from different backgrounds, from different cultures, and in some cultures, some behavior might be okay or at least not frowned upon. It’s tricky, right?**

49:30

Dania

This is a big challenge. We were talking about this diversity aspect in terms of culture or nationality. In different countries, you have different behavior that is accepted or not accepted. That's what I mean with the hardline. Some things you don't accept. If someone is yelling or cursing at others – that is global, right? But some things are more subtle and you never know. As the person that is receiving it, you also don't know what the intent was. Maybe the person didn't have the intention, but it was bad.

It's not easy. I think it's case by case, that we need to understand. But one thing that definitely helped was when we got reports of the same behavior from the same person towards different people. This was not a one-off behavior. It was someone that was doing it with different people throughout some period. That's when we said, “Okay, it's worth talking to this person. But at this point, there was a lot of damage done already.”

50:42

Alexey

**At least in my experience – I did need to deal with this in real life, but in Slack, quite often. I didn’t think about this when starting a Slack community. The reason we actually had to have code of conduct was that there was inappropriate behavior. How could we point to this person that this behavior is inappropriate? Of course, we need to have these guidelines – this code of conduct. Yeah, it's tricky.**

51:18

Dania

At some point we even discussed if everyone needed to sign it. When you apply to become an AI Guild member, you apply, and we just want to protect the community from people that are not in the field, like recruiters. So we did this signup form, but we also thought, “Should we ask people to sign or to check that they read the code of conduct?” In the end, we said, “No, it's more about if you want to be active and participate, you will read it. If you don't read it, then it was always there.” It's your part as an active community member to be aware of it.

If you do something that you were not aware of, because it didn't read it, then it's really on you. We trust everyone. We start from this based on trust – that people really want to be part of a community and they don't want to be toxic and break the community. I don't think anyone is doing that intentionally, but still, so you can always refer to the code of conduct and see maybe what is expected and what is unacceptable.

52:20

Alexey

**My own experience is that even if you point to the guidelines 100 times, very few people actually read it. But I think in your community it’s different, because it grew from in-person events, rather than just a Slack community where everyone can join. Spammers don’t read the code of conduct. [chuckles] They just come to spam.**

52:44

Dania

Yeah, exactly. You offer people the opportunity to read it, but they will only read it if they want to. You cannot force them.

52:50

Alexey

**Yes. Like this license agreement, right? When you install something or accept cookies or whatever.**

52:58

Dania

Yeah, you accepted it. So if you didn't read it, then you cannot complain afterwards. [chuckles]

53:03

Alexey

**Yeah. I wonder how many people actually read these license agreements.**

53:09

Dania

I was in at least two or three conversations about having some sort of AI to go through it and transform it into human-readable stuff. Or at least summarize the most important things because yeah – no person reads everything.

53:27

Alexey

**[chuckles] Yeah. And these privacy policies are the same thing.**

53:30

Dania

Yeah, exactly. That's why in our code of conduct, we really tried to make it practical, like, “What are examples of things that you shouldn't say? What are examples of things that you cannot say in any case? And if you see someone saying it, what can you do?

# AI Guild’s consulting work and community

53:48

Alexey

**I wanted to talk a bit more about the Guild. Right now, you're a for-profit organization and you offer consulting. So how does it work? Companies approach you saying, “Hey, we want to deploy some models.” Help us.” Something like that?**

54:13

Dania

Yes. The idea is really that we are first a community and we want to exchange experiences. And from that, we also learn a lot from our members. The idea is that when someone is having some issue, they can come to us, through the members maybe or because they attended one of our events. They can come to us and we can come up with some offer for a solution that will address what they're looking for. Then, because we are part of this network of more than 2000 people, we can basically guarantee that we will find someone with the expertise that you're looking for inside our network.

For the community, for the members themselves, they have opportunities to contribute to the project. Some people are freelancers, so this is all they do, but even for people that work in full-time employment, as long as it's allowed, they take on some trainer roles, or advisory roles. That way, we have the contribution for specific challenges that companies are looking for.

55:17

Alexey

**So the community members do the work? You have a pool of specialists, experts in certain areas, and there are companies who need some experts and you match the demand and supply, right?**

55:34

Dania

Yes, most of the time. I'm working full time, so when it's about my own expertise, then I can deliver the projects. But, for example, this last one was in finance, banking and payments and this is not my area of expertise. Therefore, I could find people in the community that have worked in banks that have done, for example, fraud detection cases and then they were the ones that were advisors.

# AI Guild team

56:00

Alexey

**Okay. So you work as a consultant. This is your full time activity right now. [Dania agrees] How many people are like you, who consult for the guild full-time?**

56:13

Dania

It’s me and Chris Armbruster, my co-founder.

56:17

Alexey

**So it’s the two of you. Do you have different areas of specialization?**

56:23

Dania

For example in data science, you mean or?

56:25

Alexey

**Yeah. I didn't know – for example, you do model deployment and he does something else.**

56:31

Dania

Ah, yes. Okay. It's based on our previous experience. I am mostly focused on machine learning and Chris is mostly focused on the career aspects. He was a director of a bootcamp before and he is the one that mostly does the transition from academia to industry. He takes the lead on that. And then, on machine learning and data analytics, I do the technical part of the project, but also the teaching.

57:02

Alexey

**So what Chris is doing is upskilling people in a company if they need to help with learning the new tool or whatever, right?**

57:10

Dania

Yeah, and we do that for our members as well. We have events that are free to attend for our members. We are mostly doing it in Berlin, but also understanding where other members are in terms of groups so that we could put them together in the room and discuss the career topics. The idea is to do career coaching. There are two groups. The first group is people that are starting their career (meaning until 3 years of experience) and the other one is for people that are already seniors, and looking to grow to leadership roles, such as the Chief Data Officer role. For that, Chris mostly takes the lead on the sessions to understand where people are and what they could do to improve their career growth.

57:56

Alexey

**I see an interesting question from Azif. “What if you have too many customers and cannot cope with the numbers because there are just two of you?” How do you do this? Do you start finding somebody in the community to delegate work to?**

58:08

Dania

If we have too many customers, which is my plan for the next few years, we will hire people full-time.

58:17

Alexey

**Okay, that's very good.**

58:19

Dania

Yeah. That is my vision – that we have that many customers. Now it's freelance-based and project-based, but if it turns into regular income, then we can hire people full-time to do it with us.

58:33

Alexey

**I'm looking forward to seeing job descriptions from you.**

58:36

Dania

Yeah, me too.

58:38

Alexey

**Another question from Azif is, “Can you tell us more about the structure and hierarchy of your company?” But I guess if there are just two people, you don't really have a lot of structure. [chuckles]**

58:48

Dania

Basically, we do everything and we work together with freelancers or project-based people, as I mentioned. But the idea is that Chris takes on the lead on the career topics, and I take the lead on the use-case topics.

# Dania’s resource recommendations

59:02

Alexey

**Maybe one last question. Are there any books or other resources that you can recommend to the listeners?**

59:11

Dania

Yes, I want to say that the book I always recommend is about the impact of not having enough diversity working in data projects. It’s called the Weapons of Math Destruction.

59:26

Alexey

**“Math” as in mathematics. Right?**

59:28

Dania

Yes, exactly. The idea is that each chapter is a different example of how harmful or somehow math was applied in a discriminatory way because of different aspects. Maybe the data was biased, or maybe the application itself is just wrong. This book is by Cathy O'Neil, and she is also someone that is championing this idea of unbiased AI applications. Together with this, she was also in a documentary that was on Netflix and I forgot the name.

60:13

Alexey

**You can send us the link and we'll just put it in the show notes when you remember the name.**

60:20

Dania

I think it was Coded Bias.

60:22

Alexey

**Coded bias. Okay. Thank you. Very good suggestions. Thanks for joining us today. Thanks for sharing your experience with us. The journey of the AI Guild is very interesting. Finally, I'm happy to return the favor and host you here. Better late than never, right?**

# Upcoming Datalift Summit

60:42

Dania

Yes. It is a good time because I am now organizing the Datalift Summit for the second year, in June. So this is what I wanted to say. I want people to be aware of it. You can get your ticket. You can still apply to be a speaker if you have a use case in production, this is the content we're looking to have on stage. And I hope that you are also on our stage, Alexey.

61:04

Alexey

**Yeah. [chuckles] I need to… uh do you accept Workshop proposals?**

61:10

Dania

Yes. We have keynote, use case discussions, and workshops.

61:14

Alexey

**Okay. Then I'll probably… I have something in mind. [chuckles]**

61:17

Dania

Cool.

61:18

Alexey

**[laughs] Okay. Thanks a lot. Thanks, everyone, for joining us today. Today is Friday, so everyone – have a great weekend.**