1:25

Alexey

**This week, we'll talk about community building. We have a special guest today, Erum. Erum is a Lead Machine Learning Engineer and PhD researcher at Justus Liebig University. Did I pronounce it correctly?**

1:44

Erum

Yeah.

1:46

Alexey

**So, Erum specializes in AI for education, she instructs at the Woman in AI Academy and leads Omdena Academy. Previously, she taught deep learning internationally and organized data science boot camps. And many more things. You will probably tell us about them. So thanks for joining us. Thanks for being here. Welcome.**

2:15

Erum

Thank you for having me. I'm so excited to share whatever I've been doing. Yeah.

2:24

Alexey

**So the questions for today's interview were prepared, as always, by Johanna Bayer. Thanks, Johanna, for help. And let's start.**

# Erum's Background

2:32

Alexey

**Before we go into our main topic of today, which is community building, let's start with your background. Can you tell us about your career journey so far?**

2:42

Erum

Yeah, so I'm Erum. I am from Pakistan. Currently, I am based in Germany, as Alexey shared. I'm doing my PhD over here. How did I start? I basically belong to a not-so-much-developed area of Pakistan, where females are not even allowed to get an education. But I'm the lucky one. I got an education, then I moved to the city, and then I started working with the community. In that manner, I was also lucky in that instead of joining and learning by joining some lessons or lectures, I started delivering workshops and courses which I used to plan.

Then I have many networks, and interestingly, through those networks, I got my research position in University Giessen, and that is Justus Liebig University in Giessen. The community I was referring to was… Do you remember, in one of the projects in Germany, I was doing the project and this university applied. The project was selected, and then I was mentoring that project. Then I offered them, saying that it is really a good project, so why should not start and offer a PhD position on that? They gladly accepted that, and then they offered me, “Why don't you send anyone for that position?” And I thought, “Why not? I should join.” So that's how I'm here today.

4:35

Alexey

**Which city are you based in?**

4:37

Erum

I am in Giessen – it’s near Frankfurt.

4:42

Alexey

**Uh-huh. Okay. So the big Frankfurt?**

4:45

Erum

Yeah.

4:46

Alexey

**Yeah. I have never been to that Frankfurt.**

4:50

Erum

You should visit sometime. [chuckles]

4:54

Alexey

**Yeah. So you work at Omdena and you… What's your title there?**

# Omdena Academy and Erum’s Role There

5:03

Erum

Currently I am head of Omdena Academy, but I started as a Lead Machine Learning Engineer, and then we started delivering courses. Then we started with Omdena School, which we just changed to Omdena Academy. So currently I'm Head of Omdena Academy.

5:28

Alexey

**It's amazing. I'm sorry to hear that in the area where you grew up, that women cannot get an education. And it's a very lucky situation that you managed to do this. Hopefully, this situation changes. Luckily, we can speak here because you got the education – you went through all the things you said. Yeah, I'm really interested to learn more about Omdena – what Omdena is doing in general and what you specifically do there.**

6:04

Erum

So Omdena is also a global community. It started back in 2019 and I am one of the collaborators. We call every participant a “collaborator”. It works [as follows:] you have a real-world challenge and collaborators around the world solve that problem with the help of AI. We started building a mental assistive application in 2019, then finding anomalies on the surface of Mars and figuring out if life is possible or not – something like that. But the major learning is – we are not [an organization] that is working from one country or from one educational/social background.

There is a group of 50-60 people from different backgrounds, ages, qualifications – and we learn together. Initially, it comes up to you like, “This is the project and you have to get to the bottom of the solution to the problem.” That is when Omdena started. It was a really great learning platform. Firstly, you learn by doing and that is [using] real-world datasets, which is very rare in AI projects. The second thing is, you have people from diverse backgrounds and you network with them – you learn how they deal with situations, and they support you. If you want to do something, they refer resources for you – they help you out. This is how Omdena works. What do I do there?

We started from this very first project – I was working as a collaborator. Then I joined Omdena on and off – we started building the graphic. I had a bit of experience in graphics, so I started building certificates. We thought we should have… Because AI and data science courses are very expensive and out of reach for underdeveloped communities, so why not build courses from these projects that we are doing with real-world [data]? That could be a capacity building for the collaborator. For example, if I want to be a teacher, I can teach these people free of cost – it will be helping them in learning and it will be helping them to be a good instructor. [Thus], we started this program –two people from that project can deliver the course and anyone, without any geographical boundaries or financial boundaries, can join the course.

At Omdena we provide them the platform for the instructors and students. Once they do the project, then they can do the course – they can be part of the Omdena projects. Because with the passage of time, the [people’s] competency level increases. There are 1000 applications and we need only 60 people for one project and everyone wants to join. So this was also helping us out – we are training the people, they already know the process and they can join Omdena itself as a collaborator for projects.

9:40

Alexey

**So was it more driven by necessity? When you saw that when people join projects by Omdena, you saw that, more often than not, some of the participants (collaborators) lacked some skills, so you thought “How about we create a course?”**

**So they go through the course, and when they join the course, they already know the basics. Or was it more the demand from the students (collaborators) who said, “Okay, we want to take part, but we're struggling with these areas, so we want to have a course about this before we continue.”? Or maybe both?**

10:19

Erum

Basically, it's not 100% aligned with the requirement. It's no doubt addressed towards the skillset that is required for the projects as well. But we deliver the course after the completion of a project. So it is not directly linked with the project itself. It is just like… We have done one project at Omdena, and we want to teach how Omdena works so people would be able to learn in that way. So it is [a way to learn] for them and then they have an idea of how to do projects in Omdena. So it is somehow linked with an upcoming project, but not 100%. Whatever they have learned, they will replicate the learning. It's not… It's just parallel, not like…

# Omdena’s Community and Projects

11:13

Alexey

**From what I understood from you, it was more about the platform and the community – how exactly you interact with people. Did I understand it correctly? Or were there courses like the basics of data science, I don't know… Pandas Intro, NumPy Intro – things like that?**

11:32

Erum

There are now courses on that as well. Because when we were growing – we started it in 2021 – and it's been more than three years, so we have started these basic courses. But initially, it was not like that. It was [projects] like developing a computer vision solution for vision-impaired people in Germany. That was a project – people did that, and then we developed a course on that, like “How can people detect transportation if they are visually impaired?” Then there were courses on natural language processing – how to prepare students for interviews and assessing the abilities where they can do better. So courses like that are there.

Then there was agricultural reform through AI [projects]. So it was not [courses that were] just the basic introduction to computer science. But eventually, organizations started reaching out to them, like the Bhutan government (we are delivering courses through the Bhutan government). They started asking us to develop a structured course. Then we had to start with… We have our foundational data science course, where we teach the introduction to all these skill sets, like pandas, Python – and then bring them independently to an AI project.

13:12

Alexey

**Maybe I… My impression from talking to you was that the courses… So when you said the courses usually started after the project, was it something you learned from the project and then you tried to teach? So it was like, “Okay, now I learned [this]. I seem to understand this, but how can I understand it even better?” “Yes, you can do this by teaching. How about you just teach what you just learned?” Was that the idea?**

13:40

Erum

Yeah, exactly. You're right. It's just like that.

13:46

Alexey

**Uh-huh. Yeah, that's awesome.**

13:48

Erum

Yeah.

13:48

Alexey

**Because that's the best way to learn something. Because, at the beginning, you think, “Okay, I think I get it.” But then, when somebody asks you to explain it, you start seeing the gaps in your understanding. Right?**

**Then, when you go back and try to fill these gaps – to understand them – the best way of doing that is actually coming up with structured content, like a course. And then you will quickly see all the gaps. And that was the idea, right?**

14:20

Erum

Yes, exactly. That was the idea.

# Course Development and Structure at Omdena Academy

14:24

Alexey

**And how do you decide what kind of content to teach, what kind of courses to [provide]?**

14:32

Erum

Basically, I've been working and am still working as a facilitator. I also teach a few courses. I decide how I should teach the course, basically. I have a degree in computer science and I want to learn something new. So instead of taking paid courses, I started learning and then made notes, and then I delivered the course. Otherwise the content just [stays] with me – I'm not doing anything with the content. I prepare the course on that and deliver it.

And when I'm delivering, I'm learning, “Okay, I have to solve it because I have to teach it.” That's how I learn. But for how we are using the platform is that people… We have a web page for registration, so collaborators from the projects apply for the instructor [position], and then we review their content and their course outline. Then, after having a few sessions on how we can change it, how it could be more realistic, we create a page and start a normal course. That's how it [usually goes]. It depends on the person who wants to deliver a course.

15:50

Alexey

**And the courses are free, right? Aren’t they?**

15:52

Erum

Yeah. Free. Free for both actually – for the instructor and the students as well. So you're not getting anything if you are teaching.

16:02

Alexey

**This is how it works at DataTalks.Club as well – the courses are free for everyone, including the instructors. But there is also beauty in that, when the course is free – the reach is wider. So you can reach places and people, you wouldn't be able to reach with a paid course. And this is amazing, right?**

16:27

Erum

True that. That… I always talk to my CEO, like “We should sell them.” And he always says “Education is something we cannot earn. We should not charge the students.” We are charging the organizations because they are already self-sustained, but the students we don't charge. It's free, of course, for them to learn.

16:56

Alexey

**You mentioned organizations, this is…? You talked earlier about that – when an organization approaches you and says, “Look, you have this foundational data science course, and we want you to teach this course at our company. Can you come and do that?” And you say, “Yes, but it will not be free.” Right?**

17:19

Erum

Yeah, that's how we work.

17:22

Alexey

**That's the business model.**

17:25

Erum

True.

# Student and Instructor Engagement

17:26

Alexey

**Uh-huh. Interesting. Do I have to be in the Omdena community to join the course? Do I have to do a project first, for example?**

17:38

Erum

No. For an organization that wants just courses – we just develop courses for them from the Omdena platform. All the organizational stuff is taken care of by Omdena. From [the side of] Omdena Academy, our responsibility is developing curriculum and content and stuff like that. So they don't necessarily need to do the project. With companies, it goes the other way round – they do the course and then the graduates have to do those projects. We do first with organizations, and then we offer… sometimes we open a local chapter in that country and whoever graduated, we ask them “Let's do this project.” It's not a bottom-up approach.

18:33

Alexey

**It's interesting, my original question was a little bit different. But what you said is – so let's say that this country (let's say Kenya) and there is an organization that wants to have courses there. They don't have a project yet – you first do a course with them, you upskill the people in this organization, and then once they understand the basics of data science (for example), then it's easier for you to say, “Okay, it looks like you have some problems that we can help you address. Let's make a project.” And then the students who graduated from that course can already do the project. Right?**

19:13

Erum

Yeah, that's how it works. Sometimes they give us the problem, sometimes we also define “This is the problem in this region, let's solve this.” And we already have the capacity – and the people who have graduated can join. Anyone else from outside is also welcome.

19:32

Alexey

**My original question was actually for the students. So let's say if I'm a student – I have not heard about Omdena yet. I have not done any projects with Omdena yet. But I came across a course that is interesting for me – let's say this foundational data science – and I think I want to take this course. Can I do this or do I need to first do a project with Omdena or somehow be associated with the community, or, I don't know, have a friend invite me or something like that?**

20:03

Erum

Oh, sorry. I did not understand. Yeah, I got your question now. Yes. Basically, to join a course, you don't need to be part of Omdena. But to deliver a course, you need to be a part of the Omdena community. So anyone can join an Omdena course, but once you graduate, you become part of the Omdena community, and then you can join any project of your choice.

20:32

Alexey

**Uh-huh. I'm curious, how does it usually happen? Do people just come to you and say, “Hey, I want to be an instructor.”? Or do you have to proactively look for instructors for certain topics? Or maybe it's a mixture [of both]?**

20:48

Erum

So it's a mixture. We have… The link is open – every single time, anyone can apply for the instructor [position] at any time. Sometimes, there is a demand for a new topic and people ask if there is an interesting project going on. We also reach out like this – the project is very interesting, and then I ask a project team that is active and that would be willing to deliver the course, “Why not make a course on this X challenger project?” It also works in two ways.

# Engagement and Motivation

21:36

Alexey

**At DataTalks.Club, we also have free courses – I mentioned that. And one of the courses just ended today. It was a data engineering course, and we had 2,500 registrations (signups) and 350-roughly people graduated. This means that the completion rate is slightly above 1% – it's 1.4%. So this is between the people who signed up and those who actually ended up with certificates.**

**The course is tough, yes. So I understand that there's some sort of natural selection. But also, when a course is free, it doesn't cost you anything to just sign up and not show up at the end. Do you see something similar with the completion rates of your courses?**

22:29

Erum

Yeah. We are trying to engage more people and trying some engagement activities as well. It’s the same with us. Our courses are not recorded – those are live courses and we also have like 400–500 registrations, but eventually we only invite 100 people. Because we have some capacity and also, financially, we have capacity to deliver free courses to 100 students. The graduation rate is 33%. Graduation means… It used to be, most of the time, 50–60 students from the 100 are always active – they are joining courses and stuff like that, but they are not able to do the project.

The competency or difficulty level is maybe a little high, or they are not submitting assignments. For the graduation criteria, they have to submit a final project and assessment. If they don't do that, they will not get a certificate of participation. There are people who attend throughout but are not doing the project. So it’s like 30% on average. We can say that our graduation rate is 30%.

23:49

Alexey

**This is quite cool. So what you do is also… In our case, this is just natural selection – people who are not motivated or who don't have time or have difficulties – they naturally drop out. In your case, you do some pre-screening. You have 500 applications, but only 100 can join the course. Right? What kind of criteria do you use, if it's not a secret? [I’m asking] to understand who joins.**

24:18

Erum

Yeah. Basically, we have criteria for the course – there are prerequisites and there is motivation. We always have one question, “How many hours can you spend in one week to continue the course?” This really helps us a lot to do that. After completion, they get a free subscription to other learning platforms as well. I think you don't mind [if I mention them] like DataCamp or others – we have collaborations. We give free vouchers for that as well.

This also motivates them. They write that in the motivation, “My friend graduated, so I will refer [people]. Yeah, I got this after completing this course.” And then they put in a little bit more effort. As for the selection, we take motivation as a prerequisite, (if they know [something about the topic]) and the time they can spend.

25:22

Alexey

**Yeah, that makes sense. I was asking… It has already been almost half an hour that we were talking about teaching and courses and I was thinking like, “Wait, the topic is actually community building. Why are we talking about teaching?” And we spent so much time [on this topic]. But this is quite related, right? Because when you teach – when you do projects, when you do all these kinds of things – you form a community. And then people who took part in projects, who maybe learned from other courses that you provide – they start feeling motivated and empowered to also at some point teach. The process of…**

**When you join, you don't know if you can teach something and then to the point when you learned enough from the projects – and you feel like, “Okay, now I want to give back.” This is quite a process to go through, right? And the community can make this happen. So I'm curious, how do you see the connection between teaching and creating and maintaining a community?**

26:40

Erum

Creating the online community, I don't have much of a role over there, frankly speaking. There are other people who work really, really [hard at that]. We have a community manager, and there are other perspectives as well. So I am doing a very small perspective, which is teaching.   
27:02

**Alexey  
“Very small.” [chuckles] It’s quite big. [chuckles]**

27:04

Erum

Yeah, very small.

27:06

Alexey

**Maybe for Omdena, yes. [chuckles]**

27:09

Erum

You know, as a person, I have been involved in various communities because… I have experienced this. It helps you really well. I am learning. I have to learn. I have to get a job, and I am frustrated in my room with a lot of content – I cannot do anything. [But] when I go and meet the people, even attending a workshop, I am able to see, “Yeah, there are people.” And you share your frustration as well. It is not only learning, it is the other perspective of learning as well. I have been part of communities like Women Who Code. Unfortunately, it has just dissolved, but it was also really, really a big learning community. I'm still part of Neuromatch Academy. That is also a really amazing community that teaches AI and data science courses. You meet people around the world and then you know… You feel how it is for everyone, instead of you sitting here and learning and ultimately stressed in your mind like, “You have to complete that.” And there is no motivation.

But when you meet the people and do the things, most of the time, they just give you an overall view. You have to do practical [part] by yourself in your free time, but at least you got an overview and you meet the people. So for me, it is really an important perspective from people who are just like you in their career, or just graduating, because that is the point. They need communication skills – they need to know outside [perspectives] from their own thinking shell. That's how I take it as how it could be beneficial.

29:21

Alexey

**As I understood, you took some leading roles within this community, like Women Who Code, Neuromatch, also at Omdena. I'm wondering, what motivated you? Because this is not a paid job, right? So you just thought, “Okay, I want to do this,” and felt empowered to do that and did it, right? So what motivated you?**

29:48

Erum

For Omdena I joined it… They were building something. I got some posts from Facebook, and then I connected [with] them and they launched the project. I joined that and met many people in the community. One of my really good friends, Anju, also was a Lead. She invited me to deliver a workshop in Women Who Code. I delivered the workshop, and then I met a few [people]. Then I guess there were conferences and I had a few voluntarily enroll on maybe evaluation of something.

And they offered me [a position because] they had an opening for a leadership team, and needed 10 hours per month to organize such events. And then I took that. So it was not that I wanted to join this. It was that I met people who referred me and then I thought, “Why not?” So I wanted to connect with the people. That was the best way to be in touch with them.

30:58

Alexey

**So the motivation was kind of gradual. At the beginning, you were a part of the community – you met people, you networked. Then, as you built your network, more and more opportunities appeared. In these communities, they had some sort of frameworks, I guess, for people who are motivated – who want to do something – to tell them, “Okay, but we need help with that. Can you give us at least 10 hours of your time per month to do this?” And you thought, “Okay. Yes, I can do that.” This way, you continued networking and maybe met more people, right?**

31:39

Erum

True that. Yeah, it was just like that.

# The Role of Teaching in Community Building

31:43

Alexey

**Okay. Because one of the reasons this question is interesting to me, personally, as a community manager myself, I want to make people… I want to… How can I say this? I want people to feel empowered to actually go ahead and do things – to feel motivated to do things, like start a project, or, I don't know, start a local meetup group or something like that. I'm wondering how to create such an environment where people just feel like, “Okay, I can do this,” and go ahead and do that without thinking, “Yeah, maybe I shouldn’t do that.”**

**Because I know that there are communities (and I was a part of such a community, called Open Data Science) where people would just… It was a very decentralized community. People were just like, “Okay, let's start a chapter in Berlin. Let's just meet regularly.” So people felt empowered to do that. And I'm wondering if you have an opinion about that – how to make a community, such a friendly community, such an empowering community, a motivating community, where people would just take leading roles.**

33:03

Erum

Yeah. Basically, with that, we also built, in our community, a small community that is just women – AI Wonder Girl. It was just us, coming from different communities, girls just make up the group. Initially, we were just seven- eight girls, and now it's 100+. So, it was just like that – we have the Omdena community, most of us working there. We have Women Who Code working there, Woman AI – such a data science community. We used to meet online because during COVID, it was only possible online. Making small groups, just do that and meet every week, or every month, to do something. We won three really good projects.

At AI Wonder Girl, we have one-three projects as well. It was just as you said – meeting and then motivating ourselves, “Let's do this – meet every week and discuss new topics: what is new in AI, what is new in generative AI models (or something like that).” We used to have subject experts as well, like a person from an ethical background or a social science background who gave a clear enlightening. It was not just “You will implement AI and there are no ethical boundaries,” and stuff like that. So it helps you when you start taking initiative. I am always afraid of taking big initiatives like, “I will start a community today and then, in a week’s time, I will have a big workshop of 500 attendees. No, it is not possible.”

So we always have to start gradually, “Let's start meeting. Discuss a few topics then just explore a model, and then present it.” So it is not like starting from a big aim that you are not able to achieve. So my recommendation is to start with a very, very small thing that is doable.

35:33

Alexey

**Like a small WhatsApp group.**

35:38

Erum

Yeah.

35:39

Alexey

**Because you were talking about this AI Wonder Girls, and I was thinking, “Such a great name.” And then I remember that a few months ago, we had an interview with Sarah, who I think is a co-founder of that community, right?**

35:54

Erum

Yeah! She’s a really good friend! Yeah.

35:57

Alexey

**Yeah. In that interview – the interview was called Make an Impact Through Volunteering in Open Source. I think it was a few months back, where she talked about the group and how you won a few hackathons, right?**

36:17

Erum

Yeah, that's what I'm talking about.

36:19

Alexey

**Yeah, that's cool. For those who are listening and have not listened to that episode – I think it was maybe six-seven episodes ago, maybe a little bit more. But yeah, check it out. It was also an interesting chat.**

36:34

Erum

Yeah, I will check it out. Thank you.

# The Importance of Communities for Career Building

36:37

Alexey

**Okay. [chuckles] For me, personally, I am a big fan of communities. And I was a big fan of communities even before DataTalks.Club started. The reason for that is that it helped me a lot with my career. When I started learning Java – when I became a Java developer – the first thing I did was join a Java community. Or later, when I was into data science, I found a data science community and joined a data science community. I did that for many other things, like hobbies, too. I'm wondering, I'm really curious to know your opinion –what do you think? How important are communities for a career?**

37:26

Erum

Yeah. Again, it sometimes depends on the individual as well. Personally, I am a really big fan of [using] communities for career building, as you're saying. I always prefer to join if I am learning something. I have joined things like an Apple Developer community, a Google community – although it's a big community, my role is nothing. But, you know, just having a newsletter and getting updates gives you an overall update. Instead, you go there, read the whole book, and then you get an idea. For career building, I guess it is very, very important because you already have your… You have graduated from your college or university. So now you have to figure out what path to choose.

I am a computer science graduate, and there are plenty of job opportunities in the computer science domain. So now I need to find what is in demand in society. What are the topics that people are talking about? What is the need of technology? So that I would be able to learn those skill sets. You learn this from communities, I guess. You go to the communities, and you are part of that. It gives you an idea what is needed – what skill sets are needed – and then you develop those skill sets. And for [personal] development, just start teaching – start building your own community and make a group and learn together. This helps you a lot. I guess this is the fastest track of learning.

39:14

Alexey

**I'm wondering – again, you mentioned, “Build your own community.” Usually, this probably happens when there is a larger community, and there are people in this community who can just say, “Okay. Look, we all live in Berlin. How about just meeting here for coffee every two-three weeks?” Right? Something like that. How do you think communities should make it possible so that these things appear? [So that] these little sub-communities happen? So that people feel empowered to just say, “Let's create a WhatsApp group where we can hang out and everyone from the bigger community – if you're interested in this specific topic, (like this hackathon, or this thing) just join.”**

40:00

Erum

Yeah, that's very interesting. For example, as an individual, probably nobody knows me. But when I say, “I am from DataTalks.Club. We are meeting in Frankfurt on this day.” That has authenticity – people will come and listen to me. My thought on that is, as a bigger organization, we should put them in… Yeah, I totally understand if someone is using your name, they should be in ethical values, and they should present content that aligns with your agenda. But this will really help a person feel empowered, because individually, I cannot go and talk at any place [I want]. But when I represent X community (any name of a community), people recognize them.

They are not able to reach out to the bigger community directly, so they prefer, like, “Yeah, this is the Omdena International Community. Let's make a Frankfurt chapter.” Because they are doing the same thing and [it’s] accessible. As a local, I can physically attend the event. So, a WhatsApp group, I'm not that much of a fan in that perspective, because it is, again – it’s just a personal wish. You will not be able to talk to many people. So maybe a public page or any other social network where people from the same region can join this group. [This page would be] representing, maybe, any bigger community.

# Advice for Aspiring Instructors and Freelancers

41:53

Alexey

**So maybe now I should make a blog. So if anyone wants to start through a local chapter of DataTalks.Club, please don't feel that you have to ask me. Just do it. And then we have all the Slack channels, and if there is a Slack channel missing for your geographical area – everyone in our Slack can just go and create a channel. Because sometimes people ask, “Can I create this channel or that channel?” You can. You just go and create it.**

42:24

Erum

Yeah. And use the name.

42:26

Alexey

**Use the name, yeah, of course.**

42:28

Erum

And then you will have more reachability. Literally, it makes you more authenticated.

42:35

Alexey

**Yeah. Do you have any other tips for good community management?**

42:41

Erum

So far, I'm not, again, a community manager person. I have a very small role.

42:48

Alexey

**But being a part of many communities.**

42:50

Erum

Yeah. For me, the most [important] thing is engagement and giving value. For example, if I'm joining a community and spending my time, what will I get after spending maybe one hour or two hours in a week? So a takeaway would be [something like] giving a clear path [in terms of], “What are the values behind attending and being part of the community?” People stay connected when they have always…

We are human – we always see the benefit, not sitting and listening to anyone for one hour. What will I get after attending that? So maybe if we define some small takeaway (maybe not a three-month goal) maybe just after attending one session – what will be my takeaway? Or what can we deliver to a person who joins any of our activities (a talk, podcast, schools, or workshops)?

44:09

Alexey

**That's great. I never thought about that. Usually we just say, “Hey, let's meet for coffee.” Without specifying what people will actually get. Now I think [about] – if I'm a person… I may have university or work friends. I'm also tired. I’m lying on a sofa right now. I open my Slack and see, “Hmm. There is a community meetup today. Ah, I’ll just watch Netflix.” Right? So how to compete with Netflix? How do I show the value that people [can receive]? “Okay, Netflix can wait because I can just go back from that and watch this. It's all recorded. But the meetup is not recorded, so I’ll miss out.” So how to do that. Yeah, that's interesting.**

45:07

Erum

Yeah. For me, if I have to maybe invite someone to where I’m presenting, I will always say, “Yeah, let's meet and discuss the topic. After that, maybe we’ll find out.” As a person, I think, working with many individuals, we always think about the results. So if we always advertise this, “Let's meet and figure this out.” When you have the conclusion, you don't know it 100%, but you are trying. So, “We are meeting today, and we are figuring out a data science job.” Or maybe, “[We are figuring out] a skill set required for a job.” Or maybe “[We are figuring out] how to implement a data science model through web services or Streamlit.”

So I already know how to build a machine learning model, but I don't know how to showcase a machine learning model to a non-technical person. So this will also trigger me [to think], “Okay, let's see how to deploy it in Streamlit. I'm free, so I will go there.” I think when we have a clear takeaway, this might trigger more people [to attend].

46:28

Alexey

**Yeah, that's very useful. Do you have any other tips?**

46:33

Erum

Yeah, that’s it for most people. Another thing is that, as a community, we are developing (we are offering) so many things, and we just need to maybe [do] a bit of categorization like, “This for the basic level. This is the intermediate level skill set. This is the advanced level.” And what the application is. Something like [that]. Again, I always go for making the cluster so that it would be easier [to group]: data science, machine learning, AI are quite vast domains. So, if we have teams and specific areas, then it is easy to reach out and for the people as well. Instead of joining and seeing that it is not relevant to me after half an hour, I should be able to know, “Okay, this is the activity and this could help me because the message is clearly mentioned.”

# DS and ML Talent Market Saturation

47:50

Alexey

**Yeah, thank you. We have a few questions from the community that I want to cover. I don't think I will be able to pronounce the name, sorry. Jaou? There is an “a” with a wave – I don’t know how to pronounce it. It's probably Portuguese. Anyway, sorry. The question is, “Do you feel that the market is saturated with data scientists and ML engineers?”**

48:20

Erum

I don't think so. A very funny thing [happened] a few days back, the husband of my friend (we are in the same group – he’s German, they live in Austria) shared a message. I'm from Pakistan and he shared a message that Germany is looking for more IT people. There was an IT job. And I was discussing that there are many people I know that are not getting jobs. So it is not that there is a shortage [in the] market. Actually, there is a shortage of uniqueness.

For data science and machine learning, everyone knows that. But when you apply, you always have huge competition. So you need to show yourself as really unique – maybe an application of that. You need to think about it. There are hundreds of machine learning engineers, so how you distinguish yourself? If you require that one skill set, I think you increase your value. There are 1000 jobs, and you are the only one who has that skill. So it will make you more unique. I think there are many jobs still available. We need to figure out how to make it more applicable – not ChatGPT code or copying a project.

49:54

Alexey

**Yeah, interesting that you mentioned that. On one hand, there is a lack of people who want to… Companies need IT people, right? Companies need data scientists. On the other hand, there are so many people who can't find a job. And this just doesn't… This is just strange, right? There is a shortage and there are also a lot of people who can’t find a job.**

**Just yesterday, we had a meetup in Berlin, and one of the people who joined said that he has problems finding a job. And he has an amazing CV. He has a really good CV. He has experience, yet he has some problems finding a job. So for me, it's always like, “Where's this shortage if there are people who are trying to find a job and cannot just find it immediately?” Right? This is strange.**

50:56

Erum

Yes. I will just conclude that we are actually going for shortcuts as well. A few of my friends have a company and I sometimes help them evaluate resumes or tests. When you [look over] those tests, they are plagiarized. How can a company hire you when you are copying something from somewhere? We know that. We know the code, but we don't feel like typing it and doing the projects or tests on our own. So I think the more we have access to resources, the more we have become lazy.

51:39

Alexey

**Yeah, with ChatGPT, I’m so lazy now**

51:41

Erum

Yeah.

51:44

Alexey

**But this is such an awesome tool. I mean, I'm lazy by nature. Now I can use GPT to be even lazier. Maybe something… [cross-talk]**

51:52

Erum

But you cannot learn with just ChatGPT helping you out. Ultimately, you have to work. Use it smartly. Don't copy – just use it as a facilitator.

52:11

Alexey

**Another question. We talked about the Omdena school, and you mentioned that it's possible to become an instructor. If somebody wants to become an instructor, how do they find more information about this?**

52:27

Erum

We actually have a web page on OmdenaAcademy.com. They can apply over there. And then we will… [cross-talk]

52:33

Alexey

**How do you spell it?**

52:36

Erum

I can maybe…

52:41

Alexey

**If I Google Omdena Academy, then the first thing I find is Omdena.com/Omdena-Academy. [Erum agrees] “Apply as a student” “Apply as an instructor”. [Erum agrees] Yeah. So here you go. This is how you find it. For me, it was the first link. I'm sure that for you, it will probably also be the first link in Google.**

# Resources for Learning AI and Community Building

53:11

Alexey

**Another question, “What can you recommend to a freelancer to start teaching in AI? Is it possible to apply to Omdena?”**

53:23

Erum

For Omdena, I will again say… We initially had the capacity building for collaborators who have already done a project. Because our focus is teaching through that project. So if you have not gone through the project, we need to first train you on how the projects work. Then [we can] hire you. So I would recommend joining an Omdena project (that is also free). Join any innovation challenge or challenges, learn the process, and then come for teaching.

Again, most of the time, teaching is volunteer[-based] because we deliver free courses. There are a few paid courses as well, but those are very few. Mostly it's free courses. But it will really help you. If you have a good structure, then you can sell this course on other platforms, like Coursera and Udemy. You can sell that course [there].

54:29

Alexey

**Okay. There is another question, “Do you know about any resources that help women [gain] access to education on AI if they want to learn more about how AI can help them.”**

54:49

Erum

I would, again, recommend – for women or for anyone – to join AI communities. There are always courses that you can join. If you want to learn, there are basic machine learning courses from Coursera as well. You can sometimes get a scholarship if you are eligible. It's very easy to get a 100% scholarship from Coursera. They can attend that as well.

Frankly speaking, I am a person who always learns through projects. For example, whatever skill set you want to learn, find a GitHub project on that and just do it. It is really great learning. Another way is teaching. Just figure it out – [seek] out your friends and start teaching them. You will be proficient in that skill.

55:48

Alexey

**I think this is more gender-neutral advice, right? It applies to any gender. Just learn through projects, and there are a lot of courses already, like on Coursera, on Omdena – of course, at DataTalks.Club, we also have amazing courses. [chuckles] So you can just find them and check them out.**

# Erum’s Resource Recommendations

56:16

Alexey

**I think that's all we have planned for today. Maybe, before we finish – if you know any sources that you want to share, maybe resources on teaching, resources on community building, or resources or on anything else that you find interesting.**

56:39

Erum

As I have already shared and mentioned, I prefer to read newsletters. I'm part of one interesting [newsletter called the] Stanford University Law Department Newsletter – they have an AI-powered law school, they have an AI newsletter. For me, those are very interesting because now, at this stage, we already have an AI skill set, and now we need to think how to ethically implement that. I will also refer people [to that] and I think it is a good [way] learn what the privacy and ethical concerns are [when we] bring AI into our day-to-day lives. If we don't address that, we might not be able to bring it to 100%. That's how I like [to learn]. I don't remember the link 100%. I will share later, and you will be able to share that.

57:46

Alexey

**We’ll put that in the description. This is something that I, at least, didn’t expect – Stanford Law School. [chuckles] That's interesting how AI is everywhere now. Yeah, why not? I'm really curious to see what kind of content they have there. Okay. Thanks a lot for, Erum, for joining us today – for sharing your knowledge, your experience with us. And thanks, everyone, too – for joining us, for asking questions, for being active. I guess that's all for today. Thanks.**

58:25

Erum

Thank you. Thank you for having me.

58:28

Alexey

**Okay, well. Then enjoy the rest of the week and goodbye.**