

# **SDS PODCAST**

## **EPISODE 295:**

### **A DEEP**

### **CONVERSATION**

### **ABOUT TECH &**

### **LIFE**



- Kirill: This is Episode number 295 with my dear friend, and your favorite guest Hadelin de Ponteves.
- Kirill: Welcome to the SuperDataScience Podcast. My name is Kirill Eremenko, Data Science Coach and Lifestyle Entrepreneur. And each week we bring you inspiring people and ideas to help you build your successful career in data science. Thanks for being here today, and now let's make the complex simple.
- Kirill: This podcast is brought to you by DataScienceGO, our very own industry conference for data scientists who want to skyrocket their careers. We've been running this event for three years now. Well, this is our third year. We did one in 2017, 150 people attended, in 2018, 350 people attended. And this year in 2019, we're expecting between 600 and 800 people attending. We've had attendees from companies like Tesla, SpaceX. We have speakers from companies like Amazon, Salesforce, Atlassian and many, many more.
- Kirill: So, if you are available on the 27th, 28th, 29th of September, then go and grab your tickets at [www.datasciencego.com](http://www.datasciencego.com) and you can still get them now and meet us in beautiful San Diego for these three days. And if you are not available, then I highly recommend seeing if you can make yourself available. We have people coming in from all over the world. Last year, we had people coming in from 23 countries all around the world. From of course U.S. to Brazil, to Czech Republic, Germany, basically people from Australia, people flying from everywhere to come and join us.



Kirill: We've got some really cool speakers, Hadelin will be speaking there, I will be speaking, or I'll be running a workshop, Ben Taylor will be speaking, we've got the Director of Data Science at Salesforce doing one of the keynotes, very interesting exciting people. And this is your opportunity to really take your career to the next level. So once again, if you haven't gotten your tickets yet, then head on over to [www.datasciencego.com](http://www.datasciencego.com), and I'll see you at the end of September.

Kirill: Welcome back to the SuperDataScience Podcast ladies and gentlemen. Super excited to have you back here on the show for episode number 295. Very, very pumped because today we have a returning guest, not for the second time, not for the third, not for the fourth, not for the fifth, not for the sixth but for the seventh time on the SuperDataScience Podcast. We've got Monsieur Hadelin de Ponteves, my dear, dear friend and business partner. And today's chat was pretty cool. If you're interested in listening how Hadelin and I just normally talk about life, about projects, about businesses, about things that we're doing, courses we're working on, we've worked on, I don't know, dreams and things like that, then this is the podcast for you.

Kirill: You'll find a healthy mix of all those things. Here's a couple of items that are on the top of my head right now off to the finishing this call. You'll find out how Hadelin attended three weddings in this past week. He was at three weddings in a row. You will also learn what is exciting that's happening in his life right now. Also we talked quite a bit about his upcoming



presentation at DataScienceGO 2019. So, if you don't have your tickets yet, you should go and get them at [datasciencego.com](http://datasciencego.com).

Kirill: You can get your ticket there, Hadelin is presenting, I think it's on Saturday. And he's going to be talking about deep NLP, specifically the BERT model, B-E-R-T, the BERT model that was released by Google. I think it was in February, definitely at the start of this year at the start of 2019, a very cool model that took everything in terms of natural language processing to a whole new level, like a whole quantum leap in that space. In this podcast, Hadelin will give you some teasers, some previews of what it is all about, and then the rest will come at the DataScienceGo Talk.

Kirill: We also talked about how DataScienceGO has evolved for him from 2017 to 2018. We talked about some other areas of artificial intelligence such as reinforcement learning, and his recent course on twin delayed DDPG, very interesting topic. We also talked about our dreams in life, where we're traveling next, and some exciting things, also about some interesting coincidences that happened recently in our lives, and things like that. There we go. That's the podcast that's coming up. Very normal talk. Very normal talk between me and Hadelin. Can't wait for you to check it out and without further ado, I bring to you my friend and business partner, Hadelin de Ponteves.

Kirill: We're online. Welcome my friend.

Hadelin: Thank you so much. I'm so excited to be back again.

Kirill: So excited to have you. It's so crazy. We were just counting. This is your seventh time on the podcast.

Hadelin: Seventh time. Yeah, wow! Crazy.

Kirill: The most popular, the most recurring guest of all time.

Hadelin: Maybe. Cool.

Kirill: That's awesome and it's really cool. How quickly does time fly? We've already done machine learning the first podcast, deep learning, AI, blockchain, trends 2018 and trends 2019.

Hadelin: That's right, yeah.

Kirill: It's been insane.

Hadelin: The time is flying super fast I think, because what we're doing is really exciting and we're working in a very fast evolving environment. All this makes time fly so fast.

Kirill: Yeah man, for sure. And crazy week for you, right? Tell me again, how did you go like three weddings in one week? How did you manage that?

Hadelin: For the first time in my life I had three weddings in one week.

Kirill: Not your weddings obviously.

Hadelin: No, not mine. But three weddings. Fortunately, they were all in France. It was actually easy to move around but it's extremely exhausting. At the end of the three weddings, I had a really long night sleep and plus in the middle of these three weddings, I did a round trip to Vienna. It was kind of epic and again, when you

have all these things happening in your life, that's when time flies super fast again because this week flies like that.

Kirill: That's true. I heard somewhere an analogy that when you are experiencing pleasure, you expand a lot, you feel so good that you're expanding. You want to take up as much of life as you can. And because of that, life flies through you really fast. You have more time going through ... You don't notice how time goes. On the other hand, when you're feeling like fear or pain, you contract, you get this scared and because of that, less life can go through you and therefore, it takes longer. It's counterintuitive like that.

Hadelin: Yeah, counterintuitive, yes, exactly. That's what I was going to say. Oh, interesting. And this reminds me of the fact that every human being is driven by mostly pain or pleasure.

Kirill: Oh, yeah. Tony Robbins.

Hadelin: Yeah, Tony Robbins. That's right.

Kirill: Do you know that Leo went to Tony Robbins, he just finished yesterday?

Hadelin: Oh, really?

Kirill: Yeah, in Singapore. He loved it. I was chatting to him today earlier and he said that ... I could hear by his voice that he lost his voice a bit, because he was yelling so much at Tony Robbins.

Hadelin: Of course, yeah, [inaudible 00:09:03].

- Kirill: It was his first time. And he said that they put the air con on so cold that he couldn't sit in his ... He had good seats, but he couldn't sit there because it's so cold, so he had to move somewhere. And there was this one girl was there for the fourth time and she came in a winter jacket. He's like, "Oh, you're well-prepared."
- Hadelin: Well next time I think I'll come with a winter jacket because each time, I'm super cold as well.
- Kirill: Yeah, exactly. Last time I was freezing. Okay, cool. So three weddings in a week, what else are you up to? You're in France now, is it really hot there, or is it already better now?
- Hadelin: Right now it's a perfect weather. I'm working on several stuff, I'm working on our new business Bluelife, we have this new lead generation system which gives us the many leads. I have many meetings with the leads each week. Also I'm preparing DSGO. I have a fantastic presentation to offer to the guests, which is about Deep NLP, the brand new state of the art techniques, which have really evolved since last time.
- Kirill: Fantastic, fantastic. Well tell us a bit more. What else are you working on? And then we'll get to the DSGO stuff.
- Hadelin: And I'm also working on some personal development stuff, like what I've been doing-
- Kirill: Is that the course Marc recommended?
- Hadelin: No, not this, it's more meditation, I meditate-

Kirill: Nice.

Hadelin: Having cold showers-

Kirill: Oh, nice.

Hadelin: ... that sort of things. Cold shower are new. Ive been having cold showers for two weeks, and I feel so great about that.

Kirill: That's really cool. That's really cool. I thought of that today because I was scuba diving. Today, I spent a total of, check this out, three hours underwater. That's like-

Hadelin: Really? Wow.

Kirill: I was thinking about it, it's one eighth of the day, which is about like 12 and a half percent of 24 hours underwater, which is pretty crazy. But anyway, so every dive was about like 60 minutes or so. After 40 minutes depending on the location, I can start getting cold, and I start shivering. And I'm like, "This is like a cold shower. But you can't escape," type of thing. So it's funny, it's good. But you've been doing them for two weeks now. You think you'll continue?

Hadelin: Yeah, yeah. Definitely. Yes. It's also about learning how to overcome your fears. Because you know the moment you're about to step into the shower, the cold, that's fear. It also trains you to embrace the fear and just go.

Kirill: That's true. And when you have the cold showers, do you manage to calm yourself down and not want to run away? Just like-





- Hadelin: Yes. I work on my breathing also. At first, I breathe very heavily and then I just ... How do I do? I just am less in my head, and then I start breathing normally.
- Kirill: Okay, that's cool. That's cool man. And all the good things to work on. How's the leads thing going for Bluelife?
- Hadelin: It's going well. Basically we have three new leads each week. We send all these emails on LinkedIn to tons of people. I would say 20 to 30 people. Three or four answers are saying they're interested and would like to discuss it further over a meeting. So that's pretty good, I think. That's a pretty good conversion rate.
- Kirill: That's cool.
- Hadelin: And besides, they're carefully selected on the industries that resonate with us, and that are at the same time, fast growing. It's really interesting each time to discuss.
- Kirill: That's cool. And what did Martin say about that project with the heart surgeon?
- Hadelin: Martin, I'm going to see him tomorrow. I don't know.
- Kirill: Okay. Cool, cool. I'm really excited about that. Just to recap, it's a project to use AI to prevent heart failures and strokes. And the ones that can happen to actually anybody that don't ... Well, I forgot the ... there's a term, do you remember the term? I forgot what it's called. A specific type of failures that can happen at any age, but yeah. And it's really exciting because it's a heart surgeon. The person who created the app is a

heart surgeon. They have a lot of domain knowledge. Those are going to be cool. Anyway-

Hadelin: You can test the project, and besides, I've always dreamed to apply AI to health. If he can already do it, that would be amazing.

Kirill: Yeah, yeah. Save lives with AI. That would be cool. And you said that this app can be rolled out in like 150 hospitals.

Hadelin: Oh, yeah.

Kirill: Crazy. Anyway, so let's talk about DSGO. I'm personally really excited. This is your what? Third year coming back, all three years, right?

Hadelin: Yeah.

Kirill: I think it's just you and Ben Taylor who have been there for three years recurring.

Hadelin: Yes, true.

Kirill: Ben is so fun. I'm looking forward to catching up with him.

Hadelin: [inaudible 00:15:09].

Kirill: And you know what's cool to see, it's like how throughout the years we've all grown in the sense. I remember Ben in his first year, he was actually still working in HireVue and now he has a startup, and he's doing crazy AI projects and stuff like that.

Hadelin: ZEFF.

Kirill: ZIFF, yeah. ZIFF or ZEFF.

Hadelin: ZEFF.

Kirill: ZEFF. I don't know. Let's start in 2017, 18, 19. So DSGO, or DataScienceGO, you were there and you're going to be there. How has it changed and what do you expect from this year's event?

Hadelin: Okay. How has it changed DSGO in general, or DSGO for me?

Kirill: For you.

Hadelin: For me.

Kirill: Yeah.

Hadelin: It's interesting, because the first year it was really a speech about myself and how I got into data science, there were also a lot of personal stuff. So that was quite wow, it's like I was not in a data science conference, at the same time, I explained my story of how I got into data science, but it was also very [inaudible 00:16:31].

Kirill: Yeah, I remember you gave that example of how you went to study for to ... Was it in Egypt or Turkey?

Hadelin: Yes, yes. Egypt. Sorry, Tunisia.

Kirill: Tunisia, to study for ... I remember, that's cool. That was a cool one.

Hadelin: A pretty intense first speech and I absolutely loved it. Then the second year was the very exciting speech also on the [inaudible 00:17:00], because I started with this game 'Who wants to be a millionaire'. I asked data science questions and everyone had so much fun. I

remember the audience are really laughing and they're screaming the answers, and that was really epic. I really loved that speech too, and then I got more serious in the speech talking about the levels of controls in artificial intelligence, and also how we're with respect to the state of the art.

Hadelin: I gave a history of how AI evolved from the first models to the models of today. That's pretty cool. And this year 2019 will be very different because this time I won't be giving a speech on general topic, I will actually give a training on Deep Natural Language Processing combining deep learning and NLP. It will be a training. And I will introduce the new state-of-the-art model in this field which really surpasses the previous ones.

Hadelin: Because basically, it makes the Seq2Seq model, which was the previous state-of-the-art model, when to build chatbots, or when to do a natural language processing, or a machine translation, it was the previous state-of-the-art one, and now the new one really surpasses it. It is a model made by Google and it's called BERT, B-E-R-T. And in the benchmarking framework, comparing the different Deep NLP models, it really is far in front of the second best model.

Hadelin: The benchmark framework is called GLUE, G-L-U-E. Talking about that as well for those that are really interested in the Deep NLP, which is coming by the way, one of the most popular branches in artificial intelligence. There we go, I'll explain how BERT works, and I can already give some teasing because the Seq2Seq model is actually an encoder followed by a

decoder and then to this, you add the attention mechanism to train an AI how to speak or how to-

Kirill: Like the temporal part, right?

Hadelin: Sorry.

Kirill: The temporal part, how words connect with each other.

Hadelin: Exactly. And with this new model BERT, well, the Google teams realized that you can make this work even much better with only the attention mechanism-

Kirill: Oh wow!

Hadelin: ... without the encoder and the decoder. They're really innovating, actually simpler, and the results are much better. All this is into this BERT model, and of course there are a lot of advanced stuff and some different layers that they added so that the accuracy can be increased. But it's really revolutionizing in the Deep NLP branch, and so that's what I'll be talking about. And it's cool because there is the full code on GitHub, but I also show a demo of how this model can be used and applied to several applications. This is going to be really exciting.

Kirill: Wow, man that's very cool. But I was going to ask you. I also heard about BERT. BERT came out in February this year, or something like that? Well, got released. Why did you choose Deep NLP? It's really important part of AI, but there's also computer vision, reinforcement learning, other parts of artificial intelligence that you could have put your attention to. Why are you interested in NLP right now?

- Hadelin: Well, it's just that I was offered a list of topics to talk about from the DSGO team. Because I guess they studied the demand for the different AI subjects. And so, one of them was Deep NL ... Well, the one that I liked the most was Deep NLP. If I had the choice myself to choose any subject, I would of course choose deep reinforcement learning because this is my favorite branch. But this wasn't in the list. So okay, cool. I will talk about Deep NLP, this will bring me back to the state-of-the-art techniques, get me up to date, so that's perfect.
- Kirill: Yeah, that's really cool. So you used this opportunity to learn something new yourself as well?
- Hadelin: There are also some computer vision topics, but for me, the Deep NLP one was more interesting because it was really disrupting the field, [inaudible 00:21:59] steady lately.
- Kirill: Now BERT is a really incredible leap. It's one of those ... What are they called? Quantum leap, right?
- Hadelin: Exactly. So you knew about this BERT?
- Kirill: Yeah, I watched a YouTube video about it describing how it works.
- Hadelin: Cool, perfect. Okay, great.
- Kirill: Yeah, it's cool. As you said, it takes everything we knew about natural language processing and translations, and all those things completely to a brand new level. Not just like an incremental improvement, like a small one, it's just like whole jump ahead.

- Hadelin: Yeah. That's exactly the reason why I chose this in front of the other ones, because indeed for the other branches of AI, we don't see those quantum leaps. We don't see those big leaps. The guests should really know about this.
- Kirill: And the thing is like we don't see them right now, but that's what we want to happen. Like maybe in computer vision there'll be a quantum leap soon, maybe in reinforcement learning, there'll be a quantum leap as well.
- Hadelin: Yes, I hope so. I'm really following the deep reinforcement learning branch of AI, I'm really looking forward to a quantum leap.
- Kirill: How do you follow it?
- Hadelin: Research papers mostly.
- Kirill: Okay. Do you get updates automatically?
- Hadelin: The good news is that the state-of-the-art model in deep reinforcement learning was actually trained by myself in my last course. It's called the Twin Delayed DDPG. It's good that ... Yes, so far students still have the state-of-the-art model in deep reinforcement learning among our courses.
- Kirill: Okay. Which course was that in?
- Hadelin: Deep Reinforcement Learning 2.0. It's the course I released in May just before TensorFlow 2.0.
- Kirill: Oh, okay. That's cool.



- Hadelin: But the model is Twin Delayed DDPG or also called TD3.
- Kirill: Okay. And why is that a breakthrough?
- Hadelin: It's a breakthrough because there's also this benchmark framework that compares the performance of all the deep reinforcement learning models. And this one is also far beyond the second one. So it's really good and ... However, in the technique there is no much innovation. It's just that they managed to combine several techniques, several reinforcement learning. Basically, you have several, a twin critic. That's why it's called Twin Delayed DDPG, and you have one that is delayed with respect to the other, and catch up with the mistakes that the first one does.
- Hadelin: It is explained really well in the course, and it sounds really advanced. But what I was actually surprised well, in the course is that everybody can understand it. But you can really visualize this because it's not that complicated actually. It's really intuitive, it's not counterintuitive at all.
- Kirill: So it's like the A3C algorithm we described in the artificial intelligence A-Z in 2017, but it has got two active critics.
- Hadelin: Yes, and there's also one big difference. The TD3 combines reinforcement learning and policy gradient technique. You will have one active critic model that will learn through Q-learning [inaudible 00:25:49]. And then another model, active critic model which we'll learn through policy gradient. Meaning it will try to maximize the reward and by applying gradient, try



to find the optimal parameters in order to maximize that reward. It uses both techniques and basically it's a hybrid model like the [inaudible 00:26:13] model we met in another course. The hybrid models are really effective in AI and they just managed to find a different hybrid model that surpasses the other ones.

Kirill: It's like they got the best of both worlds basically.

Hadelin: Yeah.

Kirill: Okay. Cool, cool. Do hybrid models come with a price? For instance they're slower or require more computational power or something like that?

Hadelin: Well, no, actually that's also one of the major benefits of the TD3. The TD3 was really fast to train. Actually, in the course we train it on very, very complex environments. You know those 3D environments when we try to make some robots walk on the field?

Kirill: Uh-huh (affirmative).

Hadelin: Well-

Kirill: That was ARS, right?

Hadelin: Exactly.

Kirill: The ARS course.

Hadelin: Exactly. That's why I was going to say for ARS, well, we couldn't train this on a 3D environment. We used a 2D environment because it's much less complex. But the TD3 trains effectively enough to train 3D robots how to walk across the field. And that's exactly what we do in the course. We train an ant in 3D, and a

humanoid across the field, which are extremely complex environments, but yet they manage to do it within only a couple of hours. Whereas for the ARS, it would take several days. None of this is ... this is really an amazing model.

Kirill: Okay, got you. And you think you'll eventually make a course about BERT?

Hadelin: Well I think we have a course about BERT that will be released in two months. That's great news.

Kirill: Is that Martin working on that one?

Hadelin: Yeah, it's Martin.

Kirill: Okay.

Hadelin: Yeah. He's not sure if it's going to be on BERT yet.

Kirill: Okay.

Hadelin: And it will be on the NLP. He's not sure if he's going to do BERT yet.

Kirill: Okay. Got you. Okay. Wow, so many different topics. That's exciting, really exciting. About your presentation DSGO, what are the prerequisites for somebody to attend that presentation?

Hadelin: Oh yeah. The good thing is that we will do everything on Google Colab. Guests won't have anything to install. We'll just give them a link at the start. They will connect and they will just really easily follow it.

Kirill: Oh. So they can actually follow along in on their computers?

Hadelin: Yes, yes.

Kirill: Okay.

Hadelin: Yeah. They will follow along on the computers. They won't have anything to prepare in terms of package installation. However, in terms of theory, I will give them some articles to read about the basics of NLP. Maybe about the Seq2Seq, but we will explain everything anyway.

Kirill: Okay.

Hadelin: But yeah, I will of course make sure that people are well prepared for this, even though I will re-explain everything.

Kirill: Okay. Interesting man, very interesting. Cool. Do you know what I'm doing at DSGO, what I'm presenting?

Hadelin: No, no, tell me.

Kirill: I'm actually doing a workshop. I remember you did a workshop last year.

Hadelin: Me too, and it's actually a workshop. The Deep NLP thing is a workshop.

Kirill: Yeah. It's a workshop. Is it?

Hadelin: Yes it is.

Kirill: Okay. What's your presentation then? Or is that the same thing?

Hadelin: Yes, this is the one.



Kirill: Okay. Got you. Okay. Really cool. Okay. All right. Then what I'm doing is a workshop on visualization and presentation.

Hadelin: Oh, cool. Yeah, very important.

Kirill: Yeah. Mostly for beginners in presentation, in visualization. The presentation stuff I find it's really valuable, like how to communicate to your audience, how to wow people, how do to get people engaged in what you're talking about, not just like sitting there listening, not attentive at all.

Hadelin: Oh, very cool. You know what that reminds me of?

Kirill: What?

Hadelin: Our very first project together when I translated your Data Science course, and because in part four you explained exactly this, how to wow the audience based on a presentation you made long ago.

Kirill: Oh yeah, yeah, yeah. I remember. Yeah, that's similar. That's going to be ... Some of those tips I'll be sharing as well from that. And we'll be practicing. Then my goal is, I want to probably send out some pre work to the students attending, and when we get there I want to actually practice presenting, and point out some mistakes people make, point out some really useful things that people make and stuff like that.

Hadelin: Okay. Cool.

Kirill: That's good.

Hadelin: I'm sure they will absolutely love this workshop.

- Kirill: Yeah.
- Hadelin: It's really important indeed in companies to really know how to transfer optimally the information, clearly and with a great enthusiasm and engagement. I'm sure they will highly benefit from it.
- Kirill: Yeah. That's very [inaudible 00:31:58]. And I think that's the ... with a lot of techniques becoming more self serve or drag and drop and you ... It's becoming easier to do machine learning. It's becoming easier. A few years ago it was hard to do neural network. Now with like things like TensorFlow 2.0 it's really easy. It's pretty much like Lego constructing bricks type of thing. The real value data scientists, the people that have extreme, I don't know, opportunities in the workplace and with companies are the ones that not only can build those things but the ones that can actually explain them, they can actually have the soft skills.
- Kirill: Because soft skills is not something you can put into TensorFlow or soft skills is not something you can put into Keras, or you cannot just get the computer to do the soft skills for you. Basically that explanation and the presentation, and that's why it's becoming ... Before it was very overlooked, soft skills in data science and AI. Now they're becoming more and more valuable and companies are actually ... I believe, are seeking them out. So yeah, it'd be cool. I just want people to be prepared for that and I have that advantage already ahead of them.

Hadelin: Yeah, yeah. Okay. Very cool, very cool. Do you know what Ben is doing?

Kirill: Ben is doing some really cool presentation. He's got the keynote at the end of Saturday. The last talk where like everybody gets in the same room, and his is called Scary AI Models, AI Auto Kill on Xbox.

Hadelin: Oh wow. That sounds really fantastic, exciting.

Kirill: Yeah, he's training an AI how to ... What is it called? Win.

Hadelin: Win?

Kirill: Yeah, yeah. But no, no. Win against other human players on Xbox in Call of Duty I think. I think the game is-

Hadelin: Are the other players going to be the [inaudible 00:34:08]?

Kirill: No, no, no. He's going to actually get the AI to play online and kill a lot of other players in the game-

Hadelin: [inaudible 00:34:19].

Kirill: And they won't even know that it's an AI. The thing is, you know how before computers have AI master things like Chess and Go, and in terms of video games, it's really played Starcraft and beat the humans in that, but that's a strategy game. This one is different in the sense it's like a shooter game. And one of the reasons why he's doing is he wants to raise awareness that AI is so much better than humans in counting bullets, looking for flashes of gun flashes, and spotting enemy targets, and reacting to things and shooting faster.

- Kirill: AI is so much better that humans don't stand a chance. And so it's better to show this in a computer game now rather than wait for, I don't know, like 10 years until we actually see it in real world, and in a real warfare, and raise awareness about that so that people actually consider the implications of AI that can do these things.
- Hadelin: Very interesting. He should actually make a blog post about this.
- Kirill: I'm sure he will. I'm sure he will. And the thing is that he hasn't yet finished the AI. And now that he's announced that it's his goal to finish it by DSGO, DSGO will be the first place where he actually reveals it.
- Hadelin: He's making the AI all by himself?
- Kirill: I'm not sure. He's got the ... I think they're doing it through ZEFF.
- Hadelin: Through ZEFF?
- Kirill: Yeah. Through his company.
- Hadelin: I think they would make it amazing courses on Udemy as well. Right?
- Kirill: Yeah. He's too busy. He's too busy changing the world I think in other ways.
- Hadelin: Exactly. Yeah. His business is going really well.
- Kirill: Yeah.
- Hadelin: It's really good.

Kirill: That's cool. That's cool. All right. Well, who else are you looking forward to meeting in DSGO?

Hadelin: Is ... What's his name?

Kirill: It's gotten so dark here. We started the call, I had light from outside and now I'm sitting in pure darkness.

Hadelin: Is Rico Meinl going to be there?

Kirill: Rico, yeah, he's coming. He's not speaking, but he messaged me. Rico, he was a guest in DSGO 2017, right?

Hadelin: Yes.

Kirill: Remember. And then-

Hadelin: And 2018?

Kirill: Yeah. In 2017, he came up to me. He's like, "I'm so inspired. I want to be a speaker next year." And I told him, "Rico, that's really nice. But first you need to go and actually do something and prove that you have something to say. And that you are not just inspired, but actually doing actions." There's a difference between feeling inspired and actually acting on it. So he went after DSGO 2017, he started his own AI startup I think. He introduced AI in his company. He started a meetup ... that's what he started. He started an AI meetup in his in Germany. He's from Germany. Then he was a speaker in 2018, he did a great talk.

Kirill: And then guess what? He went back and now he started an AI startup in fashion in LA. He's using artificial intelligence. He's moved to LA from Germany and he's using artificial intelligence to I think predict



fashion trends, or design clothes, or something. We're going to have to chat to him about this. And so this time he's coming as an attendee. I sent him some VIP tickets. I think he's going to bring his business partners as well because that's a huge journey man.

Hadelin: I'm actually super impressed. He moved from Germany to LA to build a startup.

Kirill: Yeah, yeah. I think it was two months ago or three months. If you follow him on Instagram, he was like, "I'm in LA now looking for an apartment."

Hadelin: That's amazing. Is he American?

Kirill: No, he's German. I think ... Yeah, he's German. I don't know what his visa thing, his situation is. But yeah.

Hadelin: That's where I was going because I actually started once to build a startup in the U.S. It's so expensive, it's \$1,000,000 to get a visa that allows you to put your company at a specific location where you want to.

Kirill: Wow.

Hadelin: That's why I'm just so impressed.

Kirill: Wow. And so if you don't pay the million dollars, then you have to put it where they tell you?

Hadelin: Either you pay \$500,000 and you put it where they tell you, it can be anywhere in the U.S. or you pay 1,000,000 and you get to build it wherever you want because ... And the 1,000,000 of course is used to pay some American employees. Well, that was the law at the time, maybe it changed and maybe now it's much easier but-

Kirill: Maybe.

Hadelin: ... well, that's amazing, LA? Wow.

Kirill: Yeah. Maybe he's got a business partner from the U.S. or something like that.

Hadelin: Maybe.

Kirill: But what a story, right? Going from a student ... He was actually still at university in 2017. A student flying all the way from Germany to ... I don't remember how he found out about DSGO and about our courses and stuff, but he flew all the way, attended, then in a year he's a speaker, and another year he's already got his AI startup in LA.

Hadelin: Wow.

Kirill: The guy is crazy. And he's like 22 or something.

Hadelin: Yeah, he's very young. I look forward to talking to him about this [inaudible 00:39:40].

Kirill: Yeah, man, that'd be cool. Some exciting people. Exciting people coming. Oh, the heart surgeon will come, Zain.

Hadelin: Oh great, perfect.

Kirill: He's most likely coming as well. What else? DSGOX should be fun. We're going to have what? 30 executives attending from different companies-

Hadelin: Right.

Kirill: ... that'd be cool.

Hadelin: Right. Okay. That's awesome.

- Kirill: Okay, cool. Let's talk more about data science, or AI and stuff. Natural language processing. One other thing we're excited about is RPA. Something we've been discovering more and more ourselves.
- Hadelin: Yeah, I'm really excited about RPA. This is growing-
- Kirill: That should be a very ... Yeah, like 800% growth in the next five years or something like that.
- Hadelin: Yeah. So we're focused on that and our two businesses. The courses, we want to do some more courses on RPA with certifications. It's very important. And we want to get a team with high expertise on RPA for Bluelife. We want to tackle our RPA projects. We clearly identified it as one of our several services that we offer to companies. And besides ... This is very easy. Doing RPA is not complex. It can really be easy to take advantage of that RPA trend and grow with it. Yeah, definitely-
- Kirill: And help a lot of people, it's a very cool exploring technology, robotics process automation for just in case somebody doesn't know it. Automation of boring stuff. Who wants to sit in front of a computer and just copy paste from one file to another, from one form to another, or repetitively save an attachment from an email that comes in every Monday or I don't know, like send out certain information, or even files to people on a regular basis? It really speeds things up. And I think humans are better than just repetitive tasks. Humans should be doing creative stuff.
- Hadelin: Yeah, of course. And that's why it's easy because automating repetitive tasks is of course easy. And

besides, we have some great softwares that allow to do this. Best one is UI path. We'll definitely get an expertise on that.

Kirill: Yeah, for sure, man. For sure. What do you think of the whole ethical implication of that? That some people are afraid of automation? What are your thoughts on that?

Hadelin: Yeah, I think they're afraid because things are communicated badly. We hear a lot from the media or from most people that a lot of jobs are going to disappear [inaudible 00:42:49] AI. When they hear this, they hear, "Okay, I'm going to lose my job." The thing that people forget to say, which is absolutely true and which is just part of this new industrial revolution is that, three times more jobs are going to be created. I don't have the exact figures in my head, but I think 40 million jobs will disappear by 2023.

Kirill: It's actually ... I was looking at it before, 70 million will disappear and 130 million will be created. Let me check. Let me check so we don't lie to [inaudible 00:43:31].

Hadelin: Definitely the number of jobs that will be created more important than the number of jobs which will be destroyed, well, which will disappear. Yeah. And this is not communicated. I heard these, and I saw these analysis recently. I've always thought like before that simply some jobs are going to be disappearing. No, I guess it will be difficult for these people who were doing some repetitive tasks to change jobs because of course, the new jobs will be different in terms of

knowledge, and in terms of expertise. But who wants to do repetitive tasks all their life? They deserve better. So it's just a matter of trainings.

- Hadelin: I think we should really emphasize the trainings. We should really do some better and better trainings and democratize those new techniques that will prepare people to the future jobs, rather than getting worried about this. It's important for people to keep these figures in mind and to get prepared to this new transition, which won't happen overnight by the way. People will have time to train and to get prepared for this new industry revolution. But this is something that has happened once again by the end of the 19th century with the industrial revolution, that was the same. Most of the agricultural jobs disappeared and a lot of many new jobs were created.
- Kirill: Yeah. Well, that's Deep NLP, we talked about a quite a few AI trends. Is there anything else exciting going on for us right now?
- Hadelin: Yeah. Well do you want to talk about what we're going to do in 10 days?
- Kirill: Oh yeah. We're going to-
- Hadelin: Hero club?
- Kirill: The Hero club in South Dakota.
- Hadelin: Yeah.
- Kirill: Yeah. Out of all places. The Hero club is a club which we just joined for entrepreneurs. It's invitation only and it's about changing the world I think like a club of

entrepreneurs and business owners. We get together and talk about how things are going with business and I guess it makes, I'm not sure. It's going to be fun. It's our first time. We'll see what happens since it's Jeff who is the creator. Jeff ... I should know this. Do you remember?

Hadelin: The theme of the event is, Never Forget your Dreams.

Kirill: Okay. That's really cool. Jeffrey Hayzlett, he's the creator. Jeffrey Hayzlett [inaudible 00:46:50]. Never what? What was the theme? Sorry.

Hadelin: Never Forget Your Dreams.

Kirill: Never Forget Your Dreams. That's really cool. That's really cool. My dream right now is to find inner peace and to make it sound less cliché. Specifically I want to stop.. On the Myers-Briggs personality scale, I'm an INTJ. Intuitive, sorry, introvert... Introverts, intuition, thinking and judgmental. I want to be ... It's really cool to be the judgmental in the sense of organizing things and being organized and, I don't know, running projects, but I want to become-

Hadelin: What's the name?

Kirill: Myers-Briggs. Myers-Briggs personality test. You can find it at [16personalities.com](http://16personalities.com). That's the best one I think. I'm an INTJT, they added an extra letter there. Anyway, I want to change that last letter J from a judgmental because it's driving me crazy sometimes to P which is perception, perceiving. I just want to enjoy ... This is in yoga and meditation. Enjoy just being, just watching nature and animals, people, whatever

and not like having an opinion about it. Just like it is what it is. And I've learned to more and more admire people who can do that. So that's my dream in terms of self development, I would say right now.

Hadelin: Wow, amazing. Yeah. This is powerful.

Kirill: Of course there's like lots of dreams in terms of like accomplishments and things like that. But I think those are actually less impactful for your life. Right? Like, "I want to, hypothetic, I want to climb Mount Everest." Or, "I want to ..." I don't know, what else? "I want to go and visit," I don't know, what's the country that I want to visit? Argentina. "I want to go see Argentina." That's like a dream and so on. But once you have it, it's like, "Okay, cool. What next?" But self development dreams are actually goals. Once a dream becomes a goal, when you set a timeline for it, I think there they stay with you for longer, or they actually impact the rest of your life, which is cool.

Hadelin: Okay.

Kirill: What's yours?

Hadelin: My dream would be to fall in love again.

Kirill: That's really cool.

Hadelin: And vice versa. I think I've been working so hard that I've put that out of my life for a while. Then now I think it would be amazing connection.

Kirill: Love and connection. Oh man. And you travel so much to different countries that it's like you will eventually



meet somebody. You don't even know where they're going to be from.

Hadelin: Yeah, I'll definitely, yeah.

Kirill: What I like about you is that you don't try to control that. You're not like, "I want to fall in love, so I'm going to do this, this, this." You just like let it happen. Who you meet, you meet.

Hadelin: The best is when it happens naturally.

Kirill: Yeah. That's true. That's really cool. Cool dreams. Something to think about.

Hadelin: Yours is very good, too. Very deep and very powerful.

Kirill: Yeah. That's cool man. But yeah, cool chats and then I'll see you in South Dakota in what? 10 days? And then from there we're going to go ... We wanted to do a road trip to the DSGO, but that's like 48 hours. No, sorry, 28 hours driving in two days, which is ... I think it is like 24, or something.

Hadelin: 24 hours [inaudible 00:51:02] in total?

Kirill: Yeah, yeah. We'd have to do 12 per day. We only have two days.

Hadelin: Okay. Yeah. That's doable.

Kirill: Yeah. Doable? Maybe. Remember that time when we had to drive from Munich, oh no, from Milan to Munich in 2017. Remember that drive? Man, we also thought it was doable, but we were so tired. It was like already 10:00 PM or something. And we drove for like four hours. And also we missed the whole scenery. We



went through Switzerland, saw nothing at all because we-

Hadelin: It was night.

Kirill: ... or Austria. We went through Switzerland and Austria because it was night. Because-

Hadelin: [inaudible 00:51:45] I remember.

Kirill: Yeah. Man, and we were like falling asleep, changing places. That was crazy drive.

Hadelin: Yeah, that day I remember that was a very good trip though.

Kirill: Very good trip. Very good trip, very fun trip. Yeah, yeah, yeah, yeah. Oh, before we finish up. One cool thing, that time we were meeting up with students in different places. I met up with a student in Rome and guess what? We're sitting at this Vegan restaurant in Rome. Actually I had my parents with me that day as well.

Hadelin: You told me about this.

Kirill: Yeah?

Hadelin: Yeah, yeah.

Kirill: That-

Hadelin: This other students recognized you-

Kirill: Randomly.

Hadelin: Yeah. He recognized you-

Kirill: He comes up, he's like, "Oh, are you the guy that talks about data science on a podcast?" I'm like, "Yeah."

He's like, "Oh, I've listened to so many of them. I don't know how you looked like but I recognized your voice. Are you Hadelin?" He asked me like, "Are you Hadelin de Ponteves?" I'm like, "No, I'm Kirill." He's like, "Oh, that's cool. That's cool too." He's like, "That's cool too." Because you've been on what... We count it. But you've been on six episodes, man, like no wonder. And also the FiveMinuteFriday as well. That was really cool. And it was the first time it's happened to me that somebody actually comes up. And it's cool because I was already catching up with a student. I met another student we had a great chat. It was really fun.

Hadelin: That's funny.

Kirill: Good times.

Hadelin: The more and more coincidences either happened in our lives actually, because we have now so many students.

Kirill: Yeah, 900,000. Just crossed 900,000.

Hadelin: You did 900,000?

Kirill: We crossed 900,000 yeah, yeah, yeah, yeah. I really hope it gets to a million by the end of the year.

Hadelin: Oh yeah, yeah. You mean by the end of 2019? Yeah.

Kirill: Yeah, by the end of 2019. That'd be cool. If you're listening to this, bring your friends, help us get to a million students by end of this year. But I think it should get there fine.

Hadelin: Yeah.



Kirill: Yeah man. Okay, great chats. See you in South Dakota and then DSGO, very excited. If somebody wants to catch up with you, they'll be able to meet you at DSGO for sure.

Hadelin: Exactly. Yeah, two exciting events coming up in this same month. That's-

Kirill: Yeah. Crazy, man. That's crazy. Okay.

Hadelin: All right.

Kirill: All right. Thanks my friend.

Hadelin: [inaudible 00:54:15], the podcast again. It was a pleasure and looking forward to being in the next one.

Kirill: Sounds good. All right. See you. Bye.

Hadelin: See you. Bye-bye.

Kirill: There you have it ladies and gentlemen. Thank you so much for being part of our conversation with Hadelin, I hope you had as much fun as we did. And I also do hope that you will get to meet Hadelin in person, which you can do at DataScienceGO. If you haven't gotten your tickets yet, it's on the 27th, 28th, 29th of September. You can find your tickets at [www.datasciencego.com](http://www.datasciencego.com). Make sure to check them out there and join us for this three day event.

Kirill: As always, you can find the show notes for this episode at [superdatascience.com/295](http://superdatascience.com/295). On that note, thank you once again for being here today. And don't forget to get your tickets for DataScienceGO at [datasciencego.com](http://datasciencego.com) and Hadelin and I will see you there. And until next time, happy analyzing.