

# **SDS PODCAST**

## **EPISODE 786:**

### **THE SIX KEYS TO DATA SCIENTISTS' SUCCESS, WITH KIRILL EREMENKO**



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| Jon Krohn:       | 00:06 | This is episode number 786 with Kirill Eremenko, the founder and CEO of SuperDataScience.  |
|                  | 00:27 | Welcome back to the Super Data Science Podcast. Today, Kirill Eremenko is back on the show. If you don't already know him, Kirill is founder and CEO of SuperDataScience, an e-learning platform that is the namesake of this very podcast. Kirill launched the Super Data Science podcast in 2016 and hosted the show until he passed me the reins almost four years ago now. He has reached more than 2.7 million students through the course that he's published on Udemy, making him Udemy's most popular data science instructor of all time. |
|                  | 00:59 | In today's episode, Kirill provides an overview of the six biggest insights he's had about data science careers based on his experience with the current and future data scientists that populate his fast-growing interactive learning platform, superdatascience.com. Ready? Let's jump right into our conversation.   |
|                  | 01:15 | Kirill, welcome to the Super Data Science Podcast. Where are you calling in from today?  |
| Kirill Eremenko: | 01:20 | Jon, it's great to be here. I'm calling in from Gold Coast Australia as usual. How are you going?  |
| Jon Krohn:       | 01:27 | Nice. As usual, people who have been watching these episodes with you recently, will all have been seeing the same background, which I think is great. Your Gold Coast office, nice and quiet. And you do these things really early in the morning. When I was on Slack messaging you, it was like caution, it's 6 AM for Kirill.  |
| Kirill Eremenko: | 01:48 | That's funny. What time do you wake up in Australia... In the US?  |

- Jon Krohn: 01:53 What time do I wake up in Australia? It's a tougher question for me to figure out in my head. In the US, I am a late riser. I go to bed around midnight and I wake up around 8 AM. I'm most focused and productive in the hours before bed. When the sun's out, I always have this desire to be out in the sun, running around, having fun. It's very hard for me to sit at a desk and focus. But once the sun is down, then I'm like, "All right, let's rock and roll." And I basically, I see my to-do list for the day and I'm like, "There's no way this day is ending without at least these most important things getting done."
- Kirill Eremenko: 02:32 Yeah, yeah, yeah. Interesting.
- Jon Krohn: 02:33 And then, yeah, so these last few hours are key.
- Kirill Eremenko: 02:35 That's interesting. I used to be like that and I think I still can do that, but I've retrained myself now. Our goal at home is to go to bed at 8:30 PM. and wake up at 4:30. Still get the eight-hour sleep, but by 4:30 we're up. At 5 AM we were jogging outside today already. It was our first time jogging. We don't do that every day. We decided to try it out. That was really fun.
- Jon Krohn: 02:58 Yeah, I have done that in the past. There was a period of a year or two, about a decade ago now where I was going to bed around eight and I'd get up at four and meditate before I'd get to the 5 AM CrossFit class at the CrossFit gym. The thing that was always hard for me was weekends. They became hard. And I didn't have a partner. I was single. That made it... I think if you and a partner are committed to it and your whole household is down for that, it makes it easier to maintain that. But for me it was like I can't on a Friday night, a Saturday night, a first date, and we're out with friends, be like, "Okay, guys, it's eight o'clock and I got to go home to bed."
- Kirill Eremenko: 03:46 Oh, that's funny. Oh yeah, true. True.



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| Jon Krohn:       | 03:50 | Anyway, lots of different productivity ideas out there. I don't know if that's in our FAQ for today. I'm sure I will have already covered this in the intro a little bit for listeners, but we are here to talk about the frequently asked questions that come up.   |
| Kirill Eremenko: | 04:04 | I don't think there'll be an intro. This is a Five-Minute Friday, Jon.   |
| Jon Krohn:       | 04:08 | Five-Minute Fridays always have intros, Kirill.  |
| Kirill Eremenko: | 04:10 | Oh, really? Okay.  |
| Jon Krohn:       | 04:10 | Oh, yeah. I guess you don't listen to this podcast very much.  |
| Kirill Eremenko: | 04:15 | I guess the ones with guests. Yeah. Okay. Well, yeah, I don't think we'll be covering productivity, but we're covering some really cool things I've learned from members.  |
| Jon Krohn:       | 04:27 | Yeah, you're right. You're right. You're right. It is only with guests. When you were hosting the show, Five-Minute Fridays never had intros.  |
| Kirill Eremenko: | 04:32 | That's true.   |
| Jon Krohn:       | 04:33 | But now that we have guests, there are, whenever I have a guest, I do a short intro to key things up. People will probably already know by this point that we are... Yeah, I mean you can do it, but it's superdatascience.com, your platform, the namesake of this very podcast. It's growing very quickly. You have tons of members currently. |
| Kirill Eremenko: | 04:56 | I think we have over 500 active members at the moment. Just to be clear, this version of SuperDataScience, we only launched in December last year, so it's only been six months. And yeah, what I wanted to come onto the show today for was to share some of the really cool things I've  |



learned. We have these check-in calls. Once you sign up to the platform, within a month you are invited to a check-in call with either myself or Hadelin. And in addition to those, we also have career coaching calls every month. In addition to all the labs that we have, the hands-on labs that we have for practical stuff, we also have these career calls or check-in calls once you join. I love them because I'm learning so many new things from our members. And yeah, I just wanted to share a couple of them. Let's get into it. The first one...

- Jon Krohn: 05:52 Wait, wait, wait. One quick question before we get into these, which is who is the ideal user of superdatascience.com?
- Kirill Eremenko: 06:00 That's a great question. Basically, in SuperDataScience, you get access to 40 plus of our courses including exclusive courses. And they're targeted at all different levels. We have courses for beginners and there are lots of beginners who are learning data science who just finished a master's degree or in the process of a master's in data science. Or not even in the data science field. They're transitioning from another field. We have, for example, one of the examples I have is a lawyer in Puerto Rico who's decided to become a data scientist. People who or somebody in business strategy or an engineer who want to be a data scientist. But also, we have lots of people who are intermediate level who are upgrading their skills. And surprisingly, this is going to be one of the insights, we have quite a few advanced people. I would say maybe 10 to 20% are really advanced data scientists.
- 07:00 I have an example here, a very experienced innovation engineer who knows both machine learning and cloud and works for a Fortune 500 company implementing those things from Louisiana. And we have this intros page. And so you can always go and just read these intros and we reply there all the time. And why did he join? Not

because he needs to get the cutting edge tools or techniques. He knows all that stuff always. You can always progress of course. But the main reason for him to joining was he feels lonely because the people around him don't appreciate data science, machine learning enough and he wants to be part of a community. Also, another one, another member of our community is somebody who's asked questions on... You know how you ask for people to ask questions on LinkedIn? And Svetlana Hansen. It's no secret. I'm not giving away-

- Jon Krohn: 07:53 Svetlana Hansen. She's a very frequent commenter on-
- Kirill Eremenko: 07:56 Exactly.
- Jon Krohn: 07:58 Yeah. Yeah.
- Kirill Eremenko: 07:59 She's a software senior software engineer working for a contractor of NASA. And so, she's quite advanced. And yes, she's improving a lot of her skills such as large language models. One of the recent things that she's been getting into. But yeah, she's also there because she wants to give back to the community or participate. We have a mentorship program. And I was literally speaking with Svetlana the day before yesterday, messaging about her joining as a mentor to mentor others. And that's a big deal for a lot of people because it's a way to give back to a community of like-minded people.
- Jon Krohn: 08:37 Nice. Very cool. Well, I think I'm stepping on some of the content that you had coming up later just by asking that question. But it's very cool, Svetlana, just to have that, just to be aware of the connectivity between listeners of this podcast and people that are in your platform. That's awesome. Svetlana, at the time of recording, just yesterday, she won a book. Zach Lipton who was on the show back in episode number 769, we did a book giveaway for his episode like we have been doing a lot

recently with guests who have great books. And so his book Dive into Deep learning, Svetlana, if memory serves me, I'm pretty sure I was messaging her yesterday about her having just won a copy of that book. If not, it was certainly a recent book and she's constantly commenting. She must be listening right now. It's so cool. Can I get a log in to superdatascience.com?

- Kirill Eremenko: 09:23      Yeah, of course, of course.
- Jon Krohn: 09:25      Oh, sweet.
- Kirill Eremenko: 09:26      Definitely can come. There's a lot of your followers and fans there as well, so I'm sure.
- Jon Krohn: 09:35      Oh, cool. That sounds awesome.
- Kirill Eremenko: 09:36      Yeah.
- Jon Krohn: 09:38      I'll apply to be a mentor and see if I can get in.
- Kirill Eremenko: 09:40      Of course. Yes. We're always looking for mentors. That's one of the things I wanted to share that surprised me is that the amount of people who are joining high profile data scientists who with experience that yes, they can learn, but they need the super cutting edge stuff, but there's other reasons for them joining. And I never considered that that would be such a big driver. Another reason I would like to share is that from a recent check-in call that we were doing I think in April, one of the members mentioned an interesting thing. I'm learning things that to me are obvious that weren't obvious 10 years ago. I'm really learning them. But because I'm hearing them from somebody who's new into data science, they're like saying it. I'm like, "Oh, I thought that was obvious," but it's just because of my bias that I've been in this field for so long.

- 10:34 And this comes from a member who's in the US I think in... What's that state? In not Texas, Nevada. In Nevada, and he's an accountant. And he's looking to transition into data science, machine learning. And he did a master's in business analytics. But only after finishing that master's and only after looking for different job descriptions and different jobs and so on, he realized that data science is not as structured and it doesn't require formal education training. Because in accounting you have to have that CA, Chartered Accountant which is CPA, Chartered Professional Accountant accreditation, membership of the professional body, check certain boxes, have certain years of experience to even apply for a job. And he is realizing that when looking for jobs in machine learning, data science, there's none of that. Yes, they say you have to have or they have requirements for a certain number of years of experience, but there's no requirement for formal education.
- 11:40 And moreover, this requirement for years of experience, you can bypass that if you actually have the hands-on practical skills and capacity to deliver the results that the company is after. And so that's been a revelation for him because they never taught that in the Masters of Business Analytics. It was never mentioned. And so he thought he had to get all these formal qualifications. I thought I would share that with the listeners in case someone's listening who's transitioning into the field of data science. And your background is in a field where you do need formal education and certain accreditations to be employed. That's not the case in data science. The only thing that matters in data science, machine learning AI is your capacity to deliver the results that the company wants. And of course, you have to be a good person, a nice person. You can't be a total jerk at the workplace. They probably check for that as well. But apart from that, it's about delivering results. That's all there is.



- Jon Krohn: 12:36 Nice. Really cool. Yeah. We're now into your first topic. I love that you have... It's a Five-Minute Friday, so it makes perfect sense that you would organize everything into six topics. You really nailed that, Kirill. Yeah. We're in the first one right now about no need for formal education. And it's so true. When we post roles at Nebula for data scientists, we say things like masters or equivalent experience. Absolutely, and that experience could most of the time, especially for a senior role, it would be accrued in a job. But there's no reason why somebody couldn't theoretically be out there doing projects on their own and developing that experience and having never had a job in data science could go right into a senior data science role. I don't know if I've seen that, but theoretically it's possible.
- Kirill Eremenko: 13:22 Yeah. Yeah. A senior is probably a bit harder, but for a junior mid-level, data science role, I think it's totally possible. And that brings us to point number four on my list, which is labs. One of our big focuses in the SuperDataScience community is not just courses, and of course the community is a big part of it, which we'll get to in a second. But we inject these labs. Every week we have a lab where people learn a new skill or practice an existing skill, whether it's time series analysis or deep learning or Q learning. Or we've had a few recently on Hugging Face. How to use those tools, how to integrate in large language models. We had one on RAG, Retrieval Augmented Generation. And lots of different topics that allow our users to get that practice. You can learn so much, but then when you get to real world data, it's different.
- 14:27 There's a lot of cleaning that needs to be involved, a lot of hiccups, a lot of problems. And that's a point of a lab that goes for two or three hours where you go through all of it and overcome all the obstacles. That's I think a big part. And our members, which brings it point number three,

our members are realizing that in order to get these jobs, you need to have the hands-on experience, but you also have to demonstrate that you have it. And that's where you build portfolios. This week, this or next week, but at the time of when this episode is live, it'll already be in the recording. We run our labs and then we have recordings of those labs. You can always watch recordings. This or next week we're running a lab on Hugging Face, how to build your portfolio on Hugging Face. So that every project that you do, whether it's inside one of our courses, inside a lab or a project you do on your own, you can then save it, the progress and showcase it in Hugging Face.

15:20 Then when you go to apply for a job, you're not just waving your hands and saying that, "Oh, I have done these projects." You can actually just send a link to your Hugging Face portfolio or your GitHub portfolio. We also have a lab on GitHub, or if you're doing Tableau, it'd be a Tableau public portfolio. But you send this link, let's say to your Hugging Face portfolio and the employer even before they interview, they can review that and can be like, "Oh, wow, this person is very passionate about data science. They know what they're doing. They know machine learning, they've done AI. They've done large language models. We can see the cool projects they've worked on."

15:53 And our members are realizing the importance of that, and we're guiding them into that direction because it's such a critical part of getting those jobs and bypassing. You can wait and you can just wait for your experience to accumulate, wait seven years or three years until you check that box for three years of experience. Or you can do labs and hands-on projects for three months, six months, and speed. I like the word bypass. You bypass that requirement.

- Jon Krohn: 16:20 Very, very cool. Yeah. We're jumping around and you keep talking about numbers on a list, which I can see here. You've got your six items that you want to make sure you get through. We've gotten through the first one, which was about not needing a formal education. That's one of the most common FAQs. I don't know if these are in rough order of, that's the number one.
- Kirill Eremenko: 16:39 No, no, no importance order. Just how it came up.
- Jon Krohn: 16:42 Nice, nice. And then we talked about labs, how courses are important, but labs, doing hands-on practice, that is absolutely super important. I mean, for me, that's always been how I learn. I almost never take courses. Yes, I've created courses, but I almost never take them myself because the way that I prefer to learn is I'm like, "Let's just do it." Let's find some data set or some concept that I want to try out and that it allows me to get exposure, say to Hugging Face, downloading Hugging Face models and fine-tuning them and uploading them back into Hugging Face, that kind of stuff. And then about what, portfolios? Yeah, that's what we've been doing. Oh, yeah, those are directly related. Labs and portfolios are intimately related.
- Kirill Eremenko: 17:33 Yeah. Now we also talked about mentors, point number two over there in my list. The mentors are important. Just one other tip I wanted to give to people on mentors. We have a mentorship program, lots of people applying to be mentors. Even more people applying to be mentees to get mentored, which is very encouraging. It takes humility to acknowledge that you need a mentor. And I think that's and once you pass that psychological barrier, I've had at least four mentors in my life that have had a significant impact on my life and that I've communicated with on a regular basis, and I've established a relationship.
- 18:08 One tip for people who are mentees, who are seeking a mentor. And this is something that I gave in our check-in

call, is that when you have a mentor-mentee relationship, you cannot just have a take-take-take relationship. You still need to give something to your mentor, even if it's 80/20. 80% of the time you're taking information and value out of the relationship. But 20% you have to be providing something.

18:38      And I'm talking about what is your expertise? Maybe you're an expert chef and maybe your mentor is interested in cooking, or maybe you have experience raising kids and your mentor is just going through some difficult challenge with their kids. Something completely unrelated to a topic, or maybe it can be related. But just always think about that. At least ask the question, how can you give back to your mentor? Because no relationship, even a mentor-mentee relationship is 100% zero. That's more of a coaching relationship. That's when you pay for somebody to guide you. That's called a coach. And here we're talking about mentors. You're getting it for free, how can you give back? Do your best, be proactive, see what you can do about giving back to the person that's helping you out so much.

19:24      Okay. And another cool point is collaborations. This was something I was completely not expecting, and this just came up in the past two weeks. People in the community are enjoying the labs and building their portfolios. And so much so that they're starting to collaborate on projects. Even without us saying anything. With the labs, we are proactively putting them out there. With collaborations, I just see this message pop up or this post pop up in the community. "Hey," this was a few weeks ago. "I'm interested in applying machine learning to investing and trading, and I've done a lot of time series forecasting in the past." This is a member of the community posting this. "And I'm looking for somebody to collaborate with me on this project."

20:08 And then other members like, "Oh, yeah, this is really cool. I'm in, I'm in, I'm in." We have that project going right now, and we have a second project that somebody posted about a week ago. It was like, yeah, about five days ago. Somebody posted a project saying, "I want to practice my machine learning skills and I want to build a simple web application for estimating car values with machine learning models." It's like you practice building a machine learning model, but also practice deploying it, practice building a web application. And in the end, you have this product, have this result that you can trial, test out and so on. And it's actually a working web application. And same thing, we had somebody post that and three, four or five people have put up their hand to be part of the project. And it's really cool to see that people from across different continents. Somebody's in Dubai, somebody's in the US, somebody's in another state in the US, somebody's in Europe, and they're collaborating on building this project together.

21:05 I think that's a fantastic way to learn because imagine all of the problems that they'll encounter along the way. You're not only learning machine learning and how to overcome obstacles and data cleaning and building a web application, but you're also learning about teamwork, about leadership, about following the leader, about how you collaborate on such projects. That's a huge thing. Imagine you build that over the course of a month and then you add that to your resume. That's huge, man. I don't think not many master's degrees of data science will give you that same exposure that you will get through doing this through a collaboration like that.

Jon Krohn: 21:40 That's very cool. I especially like that last project idea. Unless you come from a full stack developer background, that project might not be the first kind of project that you want to tackle as you develop data science and machine learning skills. But if you want to make yourself super

employable, being able to demonstrate that you can build a web app with some machine learning embedded in it, that is going to look really damn good as you are applying to jobs and make you... Yeah, there's just so many opportunities that then open up for you.

- Kirill Eremenko: 22:11      Yeah, yeah, for sure, for sure. Speaking of that, this is not on my list, but cloud skills, you need some level of cloud-
- Jon Krohn: 22:21      Here he is with the cloud skills again.
- Kirill Eremenko: 22:24      No, but I actually noticed that one of our members.
- Jon Krohn: 22:27      No, I know.
- Kirill Eremenko: 22:27      Went a complete beginner. She already had her first AWS level of certification because she realized the importance of cloud skills for machine learning. But we're not going to go into detail on that. That's, we've done a podcast on cloud skill.
- Jon Krohn: 22:40      This is another random side story, but it reminds me the Svetlana Hansen thing and the connectivity between-
- Kirill Eremenko: 22:46      We should call this episode the Svetlana Hansen.
- Jon Krohn: 22:51      But at my gym, at my CrossFit gym that I go to, the best athlete there by far, her name is Claire. She's an amazing athlete, and she listens to this podcast.
- Kirill Eremenko: 23:03      Wow, Claire.
- Jon Krohn: 23:05      Yeah, I hope she's listening to this episode as well. And she heard an ad for CloudWolf on the podcast. And she did the classes in CloudWolf and loved it. And she got certified...
- Kirill Eremenko: 23:17      Oh, wow.



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| Jon Krohn:       | 23:18 | Based on the CloudWolf training.   |
| Kirill Eremenko: | 23:20 | That's so cool.  |
| Jon Krohn:       | 23:20 | Yeah. Yeah. Yeah.  |
| Kirill Eremenko: | 23:22 | That's awesome.  |
| Jon Krohn:       | 23:23 | And I think that might've even been useful for the next job that she applied to and now got.   |
| Kirill Eremenko: | 23:28 | Yeah. Wow. Wow. Very cool. Yeah, we've heard lots of stories like that, but that's from our other community, CloudWolf. Okay. And so, the final note I wanted to say is we're growing this community. If you're interested in being part of it, feel free to check it out, <a href="http://superdatascience.com">superdatascience.com</a> and you can jump in and be a part of this really cool place where people hang out and network, connect. If you'd like to check out our free live training before you join, you can check it out at <a href="http://superdatascience.com/livetraining">superdatascience.com/livetraining</a> . We run it every week. Hadelin is running it. |
|                  | 24:01 | And just as an inspiration, I wanted to read out a couple. I got people post interests, as I mentioned. These are just some backgrounds of people who joined in the past week, just some of them, not everybody. And I wanted to read them all just to inspire people. Regardless of what background you come from, you can be in data science. Here's a few people that we have.  |
|                  | 24:20 | We have somebody who has a master's in sports business, and they're from Texas. We have a master's of data science from Mexico, a game developer from Romania, a cybersecurity analyst from Virginia, a full stack software developer from Kentucky, a PhD in computational neuroscience from Germany, a business strategist from the UK, a litigation paralegal from Puerto   |



Rico, and a machine learning researcher from France who likes to cook. And I'm exchanging recipe. Well, I sent him my first [inaudible 00:24:50] recipe, and I'm waiting for their recipe now.

- Jon Krohn: 24:51 Well, it's funny to me is that when you're talking about giving back to your mentors, and I didn't say it out loud at the time, but the first thing that came into my head was you could offer cooking tips.
- Kirill Eremenko: 25:05 Yeah, you could. Whatever makes it work. Yeah. That's just a list of a few people that joined literally in the past week at the time of recording. Feel free to come along, check it out. We have a free trial if you'd like to test it out for yourself. And we'd love to have you in there, growing the community. And yeah, it's a lot of fun.
- Jon Krohn: 25:27 Nice, Kirill. Thanks for sharing those insights from the front lines of SuperDataScience.com. It might sound to listeners like some of the stuff that I'm saying in this episode about learning about SuperDataScience.com and that any of this stuff is going on in here. You might think that I'm just doing that to cue Kirill up, but I have never been into SuperDataScience.com despite being host of the Super Data Science podcast. I mean, in a lot of ways it's been separate, but I think there's a lot of opportunity now for them to be more integrated. And this Svetlana Hansen is a perfect example of that. Yeah, let's get going. I look forward to seeing folks inside superdatascience.com.
- Kirill Eremenko: 26:06 Thanks, Jon. All right, good episode. Thanks. It's good.
- Jon Krohn: 26:09 Great to have Kirill back again, as ever. In today's episode, Kirill filled this in on the six biggest insights about data science careers. First, unlike many other careers, there's no need for formal credentials to become a data scientist. Second, mentors can be invaluable guides in a data science career, but try to give them back





when you can. Third, portfolios are the key to landing the data science job of your dreams because they showcase your data science abilities for all to see. Four, hands-on labs are a fun, interactive way to develop your portfolio and are a great compliment to classes. Collaborations, five, can make lots of aspects of data science career development fun, including learning new materials, completing labs, and developing your portfolio. And finally, number six, data scientists can come from any background and work from anywhere in the world with an internet connection.

26:57 All right. That's it for today's short guest episode. If you enjoyed it, consider supporting the show by sharing, by reviewing, by subscribing, but most importantly, just keep on listening. And until next time, keep on rocking it out there. I'm looking forward to enjoying another round of the Super Data Science Podcast with you very soon.