SDS PODCAST EPISODE 781: ENSURING SUCCESSFUL ENTERPRISE AI DEPLOYMENTS, WITH SOL RASHIDI

Jon Krohn: 00:00:00 This is episode number 781 with Sol Rashidi, author of "Your AI Survival Guide". Today's episode is brought to you by AWS Cloud Computing Services.

00:00:14 Welcome to the Super Data Science podcast, the most-listened-to podcast in the data science industry. Each week we bring you inspiring people and ideas to help you build a successful career in data science. I'm your host, Jon Krohn. Thanks for joining me today. And now, let's make the complex simple.

00:00:45 Welcome back to the Super Data Science podcast. Today you're in for a treat yet again with the unbelievably intelligent and well-spoken Sol Rashidi. Sol has been a serial C-suite leader at Fortune 100 companies with roles like Chief Analytics Officer, Chief Data Officer, and Chief AI Officer at Estée Lauder, Merck Pharmaceuticals, Sony Music, and Royal Caribbean Cruise Lines. She also led the digital and innovation practice at Ernst & Young and was the partner leading the Watson go-to-market at IBM. In all, Sol's been involved in over three dozen large-scale data and AI implementations, and been recognized with a string of international awards for her leadership, eight patents granted, and many more patents pending. Her first book, "Your AI Survival Guide: Scraped Knees, Bruised Elbows, and Lessons Learned From Real-World AI Deployments" was published by Wiley just a few days ago.

00:01:38 If you'd like a copy of Sol's excellent AI Survival Guide book, let me know. I will personally ship 10 physical copies of Your AI Survival Guide to people who comment or reshare the LinkedIn post that I publish about Sol's episode from my personal LinkedIn account today. Simply mention in your comment or reshare that you'd like the book. I'll hold a draw to select the 10 book winners next week, so you have until Sunday, May 12th to get involved with this book contest. Today's episode will be invaluable

to anyone who'd like to succeed at deploying AI models commercially. In this episode, Sol details her straightforward system for selecting the enterprise AI projects that will be successfully deployed, what kinds of AI projects should always be avoided, why larger enterprises drag their feet on impactful AI projects and how to overcome such corporate log jams, when you should patent an innovation, and why Chief data Officers and related C-suite roles have such high turnover. All right, are you ready for this jaw-droppingly awesome episode? Let's go.

00:02:42 Sol, yes, welcome to the Super Data Science podcast. It's awesome to have you here. Where in the world are you calling in from today?

Sol Rashidi: 00:02:51 I am really fortunate. I'm actually calling from Miami, which is my home base, but I feel like I've been a ping-pong. The past month has been nuts. It's been Saudi Arabia, Indonesia, Geneva, Paris. I just got back from Big Sky, Montana, which I would've never have gone if it wasn't for this one particular event, and I don't know if anyone's ever been to Montana. It is breathtaking. And then Chicago and San Francisco. It is just been all over the place, but I'm so happy that for the first time in four weeks I'm finally home.

Jon Krohn: 00:03:24 Fantastic.

Sol Rashidi: 00:03:24 And you guys get to open up my day and I get to open up my day with you, so super excited to be here.

Jon Krohn: 00:03:29 Yeah, we're delighted to have you on the show. You and I met a few weeks ago, at the time of recording, near Miami. I guess the first time we met was on a cruise ship that was docked in Miami. So this was for something called Summit at Sea, which was wild. I've never experienced anything like it. I had heard about it for years

and was not disappointed. Indeed, my high expectations were exceeded. I think the best way that it was described to me, to sum it up in one phrase, is it was like TED Talks meets Burning Man.

Sol Rashidi: 00:04:07 Yeah. And I would even add wellness programs in there, and thank goodness for our buddy, Jepson. He'd invited you and I had a dear friend of mine invite me. And so it was amazing because when we met, we're sort of in the same crew and we had like 500-plus people in common on LinkedIn, and we're like, "Wait, but you know Joe Reece, You know Jepson. You know so-and-so. You know so-and-so," and I'm like, "how is it that we have not met until that random happenstance, Summit at Seas? Which was, I agree with you, absolutely phenomenal. I'm glad I got the pleasure.

Jon Krohn: 00:04:40 Yeah. And I had actually, I'd been recently stalking you online because I saw that you had this new book coming out and I was really fascinated by it, and I was like, "Wow, it'd be great to have Sol on the show someday." And bam, now here you are. We've made it happen. Thank you, Jepson Taylor.

Sol Rashidi: 00:04:55 Oh, yeah, you manifested that, but Jepson's also a great connector.

Jon Krohn: 00:05:00 I think he's manifesting everything-

Sol Rashidi: 00:05:01 Yeah, he is.

Jon Krohn: 00:05:02 ... and we're just puppets in that scheme.

Sol Rashidi: 00:05:04 Knowing Jepson, yes, I would agree.

Jon Krohn: 00:05:07 You have been in the C-suite at a bunch of Fortune 100 companies, very well-known brands, so Estée Lauder, Merck, Sony Music, Royal Caribbean, speaking of cruise

lines, and Ernst & Young. In those roles, you've implemented a lot of transformation with AI and data, but I understand that you've also maybe made a professional transformation yourself as well.

Sol Rashidi: 00:05:32 I have. It's amazing how some of the people that I meet, they're serial entrepreneurs and they've always had that fire in them. In my case, I've always been in corporate America, I've always been in enterprise. I was a CIO, CDO, CAIO, CDAO, whatever CXO it is. And so when companies decide that, "We want to do a data transformation," or, "we want to do an AI transformation," or, "we want to do X transformation," if there's a dependency on AI applications or data, usually they bring me in. I've loved the journey, but you're right, as of seven, eight months ago, I am what I call a retired and recovering C-suite executive. I said, "No más." and it's really scary because entrepreneurs naturally can't imagine working for anyone else. All I've done is work for someone else. I am a child of immigrant parents, and they came here after the revolution. It was all about having a steady income and working for a good company, and that was just my path.

00:06:34 But seven, eight months ago, I just hit a wall and I was like, "By the time I get these companies up to date, I'm going to be out of date with the way the market is going and the pace of change." And it was mostly alignment discussions, virtually actually building, and I'm very much a builder. I'm very much a creator. I love getting my hands in the weeds. And so I decided, "Okay, I'm going to give up the logo. I'm going to give up the paycheck. I'm going to go out on my own without much of a plan and just see what happens." It's been an amazing ride and hats off to every entrepreneur because in this journey now, I found I really love working with startups and scaleups, phenomenal founders, phenomenal developers, phenomenal engineers. Most of them don't have a

commercial backbone. Most of them can't take the concept and understand around processes and operations and go-to-market and building that playbook that allows them to translate the problems they're solving with what's applicable in the marketplace. And I found my little niche of being an advisor to startups and entrepreneurs and helping them bridge that gap between the two, of them building really cool S-H-I-T stuff and then knowing what to do with it. So it's been fun. It's been fun.

Jon Krohn: 00:07:52 I wonder what the Apple Podcast rules are around spelling out expletives. We're going to have to do some research on that one. So yeah, that's fantastic. So yeah, after all those years of the stability at these big brands, you're now working, I guess, fractionally with startup founders to bring your commercial know-how to the great technical ideas that they have around AI.

Sol Rashidi: 00:08:17 Yeah, I swore I would never be a full-time CDO again or a full-time CAO again. It's too messy right now, and I've been in the thick of it, right? If you ask any CDO. I've held the position four times over. I was one of the first ones appointed, if not the first one, back in 2016 as the Chief Data and AI Officer for Royal Caribbean. And it was still new. People didn't understand what the role was, but right now, I swore I'd never go and do a full-time job, so I am playing the fractional role for enterprises, but I'm playing an advisory role for a lot of startups. It doesn't pay the bills, but it's what fulfills me the most, so I have to balance the two.

Jon Krohn: 00:08:55 Okay. Yeah, but in totality, all of these pursuits together have ended up paying the bills, I guess, in that time, which is great.

Sol Rashidi: 00:09:04 Yeah. I mean, you don't make money obviously by writing a book. Everyone knows that, at least not yet, unless

you're Guy. Speaking, that's been interesting. People actually want to hear what I have to say. And oddly enough, the book's title is Your AI Survival Guide, but it's about the scraped knees and the bruised elbows. I'm very good at talking about all the mistakes I made. I have no issues talking about how many times I've made mistakes with people, with projects, with cultures, but every time I made a mistake, I learned and I just got better and better at it.

Jon Krohn: 00:09:36 Yeah. Before we dig into the book, which I do want to dig into, my understanding from the data, from seeing studies is that CDOs, Chief Data Officers, and I'm sure it's the same for all those kinds of related titles that you've had, like Chief Analytics Officer and Chief AI Officer, the turnover in those roles is superfast.

Sol Rashidi: 00:09:57 Insane.

Jon Krohn: 00:09:58 Could you speak to why that happens?

Sol Rashidi: 00:10:01 Yeah. I legitimately thought I was 100% flawed because I had had the position at Royal Caribbean, and even though things went into hypercare by the time I was done, there was still more work to do, and then the turnover. Then I went to Sony Music, COVID hit, turnover. And then luckily, Gartner had finally published something on the average tenureship of a CDO, and it was 18 months, and I'm like, "Well, amazing. I'm beating the average, at least. Woo-hoo." But my goal in life is never to beat the average. My goal is to crush the average and set the new benchmark. But I was like, "Okay, at least this turnover, now that more people are getting the CDO position, and I'm not the only one on an island, the turnover is really fast." And there's sort of a few legs in that stool. The division of labor is never clearly articulated when you come in. You have a CIO, CTO, CAO, CDO, the other CDO, the Chief Digital Officer. It's whether you

company has one or two or a mix, there is very little effort in putting and outlining the division of labor. Where does one role start and end, and where does the other one start and end?

00:11:17 So if I come on board as a Chief Data Officer, and my job is to establish a data strategy to understand where we're weak, where we're inefficient, what desires are needed, what capabilities we need to build, part of that, I call this the offensive and defensive playbook. The defensive playbook is what's our data ecosystem? Do we even have an architecture that supports the business capabilities? Do we have enough engineers? Do we have enough analysts? Do we have enough scientists? Do we have a semantic layer that enables self-service analytics? What's our orchestration observability? Do we even have a catalog? So even if we put all this effort, people know where the heck to go to with the data.

00:11:50 But then a lot of it's around performance and making information available. Okay, well, how do I make it available? Well, this data's in this application, this data's in that application. If I don't own the systems, the applications, the platforms, the warehouses, the lake environments, I cannot guarantee the orchestration, the observability, the cataloging, the quality, and the way in which data is accessible. Everything I need as a foundation completely crumbles if I don't have ownership. But classically, who has ownership of that ecosystem? The CIO, and the CIO has nothing to do with me, but they're [bleep] my role even exists because more than likely, the business has decided to take resources away, to take responsibility away. And it's a very, in my opinion, if I was a CIO, I would take it this way, like, "I'm not doing a good enough job around data and analytics and that's why we had to bring in another C-suite who's just going to be maniacally focused on this."

00:12:47 So there's a little bit of a subtle backhanded like, "We're not doing enough, so we're going to bring someone else in." So that division of labor between the CIO and CDO becomes really, really murky. And I've had really healthy relationships where the CIO has prioritized the things that I needed to do because we both look good, and I've had really unhealthy relationships where the CIO wants to be the hero and the only hero, and the business is already screaming 100 things that they don't have. I'm like the last on the totem pole, so how am I going to get my job if I have a dependency on that team and that team has completely deprioritized my work? So it gets really frustrating.

00:13:26 I think the second aspect, so that's division of labor, a lot of CDOs are brought on board to fix governance and quality. With all due respect, you can be in that position for 100 years, you'll never fix governance and quality. And so they don't see the value. And oftentimes, when I go in a position, I'm like, "Okay, we have two choices. I know where the issues are around governance. Either you can give me the funding and the focus to go and fix the root cause, which is a business process in System A and a business process in System B, but I need ownership and authority in fixing the business processes that are actually generating the issues and I need priority in prioritizing the format and configuration within our SAP system, within our CDP system because we're allowing for free form and it shouldn't be free form. It should follow this standardized format so that once we get the structured database or once we get the structured data, it has hygiene."

00:14:21 Or the other option is, "You're just going to have to perpetually fund me with a bunch of pales to catch that leaky faucet of quality data, and I'm going to have to fix it reactively. So give me the focus in funding to go fix it proactively, or you're going to have to give me enough

budget to continually react to it, but we'll never catch up." So that's the second is if I don't have ownership rights or I can't influence how business processes need to alter and change, that also goes by the wayside. And the business don't see things like governance and quality.

00:14:55 And then I think the third is most CDOs... I shouldn't say most. I have some of my peers who are really great at this and some of mine who are still learning because it's their first job in. You have to be front and center with the business. You have to be attached at the hip. You have to be there with all their digital marketing campaigns, market tech tools. It has to matter to them for you to matter to the organization because it's not about what you're actually doing; it's about the perceived value you're bringing, and they only can do that if they see you front and center and trying to help them. So that's the reason why. And there's a lot of other cultural components that kick in as well, some nuances, but I would say those are the three primary legs in the stool of why the average tenureship's 18 months: perceived value, ownership and rights, and then the division of labor is unclear.

Jon Krohn: 00:15:41 Are you stuck between optimizing latency and lowering your inference costs as you build your generative AI applications? Find out why more ML developers are moving toward AWS Trainium and Inferentia to build and serve their large language models. You can save up to 50% on training costs with AWS Trainium chips, and up to 40% on inference costs with AWS Inferentia chips. Trainium and Inferentia will help you achieve higher performance, lower costs, and be more sustainable. Check out the links in the show notes to learn more. All right, now back to our show.

00:16:19 You're doing my job for me here, Sol. I'm taking notes here to be able to recap your main points back to you, and you just did it. I'll just give you the questions and

you can... No, it's perfect. You're an amazing podcast guest because you make it so easy. You're articulate about everything, you put everything into enumerated points as opposed to just continuing on and on and on, and you keep those points clearly in your head and then enumerate them back to the audience. It's perfect. Yeah. So I mean-

Sol Rashidi: 00:16:47 Thank you.

Jon Krohn: 00:16:48 ... you just said it, but yeah, it sounds like there's high CDO turnover because there's no clear division of labor, you're brought into fix data governance and quality, but you don't have to remit to actually fix that, and you need to have a high perceived value. But that was actually, on that last point there, on the high perceived value, why is it that that's difficult to achieve?

Sol Rashidi: 00:17:05 I think if you take a look at most of us and how we grew up, to be an effective CDO, you need to know data, and to know data, you didn't grow up in the business. You either were a data architect, you were a data engineer, you were a data scientist, or at a minimum, you were a manager managing the individual contributors, or you were an MDM lead, or you were a data steward. Whatever role you held, you kind of clawed your way up because it's not like this is a natural and easy trajectory to achieve. It just isn't.

00:17:35 In any number of those positions, you're part of that defensive playbook, not the offensive playbook. You're very much a back-office contributor, and so you're not front and center. And when you're not front and center, you don't develop the muscles of communication. You don't develop the muscles of EQ. And this was the first lesson I learned. Legitimately, and I think there's a part in the book, but also something that I talk about, and Joe Reece and I actually are teaching a course on this on

Maven, the higher up you go, the less it's actually about your IQ and the more it's about your BQ, SQ, and EQ, your business quotient, your social quotient and your emotional quotient. I had no clue.

00:18:15 And I would say that I built a lot of cool stuff in my first C-suite position. I fell on my face not knowing that the first three were the most critical components of being a successful executive. So while everyone couldn't debate that, "Yeah, she's smart. She knows her stuff," I did not understand the complexities of what it takes to build a relationship in order to scale everything I was building because a lot of it is a leap of faith and a lot of it is still human-to-human interaction. And so that was a hard lesson that I learned. And so I've always placed relationships first now, at least with business leaders, and that doesn't come natural to us when we've played a back-office role for a really long time.

Jon Krohn: 00:18:56 Well said. Wow. I'm sure that resonates with a lot of listeners out there, that kind of experience as people have grown up with these incredible technical skills in data science and machine learning and engineering. And then as they've made their way up an organization, they get outflanked by people who are great at manipulating the social system at the top of the hierarchy.

Sol Rashidi: 00:19:21 And it's so frustrating. Have you ever had a manager and you're like, "How did this ding-dong get this role? This person legitimately doesn't know the space. I don't understand." Or I've had peers where I'm like, "Why are you in this role? You clearly just said something that is so not true but because no one else in the room understands our space, they can't tell the difference between fact and fiction." And then you realize that they moved up not because they were the smartest or the most competent; it was because they leaned on all the other things and they just kind of, I hate to use the word weasel, but I will

because I don't have respect for people who don't know their space, but that's just what they did. And so if you ever wonder, "How did this person become a manager," or, "how did this person become the boss," like they don't know the space, it's because they understood the EQ, BQ, and SQ, and they aligned with the right individuals.

Jon Krohn: 00:20:11 Nicely said. Lots of lessons there. All right, I promised we'd get into the book, so let's get into it. AI Survival Guide. That's a humorous title. You don't see enough funny titles in technical books, but yeah, AI Survival Guide. We're obviously going to have a link to that in the show notes and a giveaway as well.

Sol Rashidi: 00:20:31 Yes, thank you.

Jon Krohn: 00:20:31 So we'll be giving away the book to people who would like it. I would've announced that in the episode introduction. And so yeah, really exciting. Tell us about why you decided that the world needs this book and give us an overall overview of the book, for example, perhaps by letting us know what some common concerns are about AI and how your book addresses them.

Sol Rashidi: 00:21:01 So when I resigned, I noticed that this space... I've been doing it since 2011. I helped IBM launch Watson, and I've been doing concepts, use case selections, design, development, and deployment for 13 years. And the world just woke up to it, which I'm grateful for because I think the difference between Watson and ChatGPT is one was very B2B-centric, only enterprises could leverage AI, but now it's democratized to the masses, so it's just created a bit of a rude awakening. So the good news is everyone's talking about it. It's not just some innovation lab that I'm running behind the scenes that's really cool and then, "Hey, there's value in here. Let's push it to production." The heartburn that I fundamentally have is I struggle with theorists. I struggle with those that read and

regurgitate. I struggle with those that call themselves an expert or are an advisor and they've never done the work. I just struggle. I'm like, "You've got to be in the weeds to understand that in this situation, this doesn't work. But in that situation, it could work if you..."

00:22:11 And so having gone through all the deployments, having gone through the development trenches, the cultural trenches, the transformation trenches, the building of the trenches, the teams that I inherit that I have to change, or the teams that I have to build, I was just reading all this stuff and people were calling themselves experts and advisors. I'm like, "How?" If you look at their CV, a year and a half ago on LinkedIn, their title was senior manager of cyber, and now they're an AI expert, or senior manager of, I don't know, business process optimization and now they're in AI expert. I'm like, "WTF? It just doesn't make any sense."

00:22:45 And so when I was on the speaking circuit, a few people had mentioned, "You know a lot, but you're not talking about it. Why don't you write a book? Why don't you become more active on social media?" I was like, "Ah, it's not me. I'm not the hard salesperson. I sell by doing, not by speaking." And they're like, "You need to get out there." And a dear friend of mine, his name is Steve Nouri, I think you guys know him on LinkedIn, a major following-

Jon Krohn: 00:23:10 Oh, yeah. You know, I've never met him, but I think I am going to be meeting him very soon. I think I'm going to be meeting him in May finally. He was a guest on the show. Steve Nouri, yeah, he was in episode number 409, but that was a few weeks before I took over as host of this podcast. Yeah, really eager to meet him. He has an unbelievable following online in the AI space.

Sol Rashidi: 00:23:31 Yeah, yeah.

Jon Krohn: 00:23:32 I should also note this is now, now that we're just talking about dates and I'm interrupting you, we should note that your book has just come out at the time of this being... So it's last week that your book came out, so people can be going out and buying it. Anyway, sorry, I've completely interrupted you, derailed the conversation. Steve Nouri, you were talking about Steve Nouri.

Sol Rashidi: 00:23:49 Yeah. Well, we were in Dubai and we were just chatting, and then two months later, he'd introduced me to Wiley Publishing and they wanted to do more work on leadership and AI and the crossover and things just gelled. And legitimately, I think we signed the contract in two weeks, and I wrote the book in three, four months because I wasn't thinking. I had already done everything and I had to go back through every file folder from every employer, what I've deployed, what I discovered in all my notes. And so the difficult task was not coming up with the topics, it was aggregating it in a cohesive way so that non-technologists could understand the coursework and technologists could understand some of the things that they're potentially missing in the conversations.

Jon Krohn: 00:24:33 And you've done over, if I remember correctly, you've done over 30 production deployments, like serious global AI production or data? Yeah, yeah.

Sol Rashidi: 00:24:42 Yeah. I have just under 40 enterprise-grade AI applications in production, and they're still alive and well. I think three have been decommissioned. There just wasn't enough talent or they couldn't carry it over into the new AI stack. So I think three have been decommissioned based on some folks that still work at the companies, but yeah. So I decided, "Okay, I'm going to get rid of the hype and all of the [bleep] that's on LinkedIn and some of the theoretical sources and just buckle down." Here's my favorite. And I've gone into clients right now. They're like, "Here are the use cases that we

established with these management consulting firms." I'm like, "That's great, but three-fourths of those aren't going to work. And they're like, "Well, why not?" And I'm like, "You can do POCs. You'll be very successful in the POC, but 7 of those 11, you can't push to production." And the question is, "Why not?" I'm like, "Well, because of X, Y and Z." "Oh."

00:25:37 So for example, one of the chapters is really around what the heck goes into an AI strategy? We talk about it, just like a data strategy. Have you ever built one and communicated it to the board and fully flushed out what a strategy looks like of how are we going to enable you with data, or how are we going to enable you with AI in a way that's comprehensible, understandable, touches on all the points that everyone can understand, whether you're technical or not? Most people don't have that experience.

00:26:06 And then most people pick an AI strategy because they're like, "Oh, we want to focus on productivity," or, "we want to focus on efficiency," okay, but based on your existing maturity across infrastructure, data, and talent... And there's five strategies, for example, growth-based, knowledge-based, productivity-based, efficacy-based, and efficiency-based. Each one has a different set of requirements that you need to have on infrastructure, data, and talent. You can't leverage AI and be a growth-based strategy if fundamentally you have a conservative culture, you're in a highly regulated industry, and your enterprise data can't be ingested into LLMs without extreme heightened data privacy and data leakage protocols. It's just not possible.

00:26:50 "So I love the fact that you want to deploy a growth-based AI strategy around raising NPS scores or consumer experiences and personalization. You culturally actually can't do it. And from a majority perspective, you can't do

it. And here are the reasons why." People don't know that unless they've actually gone through the deployment. The other aspect of it is the use cases. Don't pick a use case based on business value. That's a big no-no. Because what's business value to manufacturing versus business value to supply chain versus business value to your financial advisors versus business value to procurement, there is inherent business value in every use case. And if you ever find yourself in the position to be the tiebreaker or decide what you're going to take on, you have naturally picked sides because you can find business value in everything. There's just so much improvements that can benefit from the applications of artificial intelligence.

00:27:46 So I invented this framework back when I was at IBM called the Criticality and Complexity Matrix. The criticality of it is you go through a series of questions. Is there imminent threat by a competitor? Are there regulations and fines that are coming down the line? Are you losing market share right now at single-digits, but forecasting shows it could be double-digits? You go through the list and the questions are there and then you rate them and it gives you a weight. And then you go through complexity. And within complexity, you measure, okay, do you have the basics of infrastructure? And here's what you need. Do you have the basics of data? And here's what you need. Do you have the basics of operational agility? Because you're going to have to redesign the operational model. Here's X, Y, Z, and the talent X, Y, Z, and then you give each a weight.

00:28:40 And then depending on where things plot, if it's highly complex and low criticality, it's a no-brainer. You don't do it. If it's highly critical and low complexity to deploy, those are your use cases. There's a lot that's going to fall into highly critical, somewhat complex to deploy. Those are the ones that require negotiation, but don't start with that first because you haven't developed the muscles

internally yet. So there's a method to the madness, and all of this is to avoid getting into what I call perpetual POC purgatory, which is where most folks are right now.

00:29:12 So there's real, tangible stuff. So it teaches hardcore technologists how to think like business executives and how to communicate, but then for non-technologists, how do you even start? And there's an example of a woman who has a business who's faced with a conundrum and she wants to use AI, but she doesn't know if it's appropriate. And the entire walkthrough and exercise, like hosting workshops, developing a strategy, explaining the why, how to select the use case, how to measure productivity. So just real, real stuff. And so that's why I call it Your Survival Guide because it's like it's not a playbook, it's not a strategy, it's not high-in-the-sky management consulting stuff. It's if you're going to do it, let me explain to you all the mistakes I made and learn from those mistakes so you don't have to go through them yourself.

Jon Krohn: 00:30:05 Since the start of April, I've been offering my Machine Learning Foundations curriculum live online via a series of 14 training sessions within the O'Reilly platform. My curriculum provides all the foundational mathematical knowledge you need to understand contemporary machine learning applications, including deep learning, LLMs, and AI in general. The linear algebra classes are wrapping up soon, but my calculus, probability, statistics, and computer science classes are still to come. The first two calculus sessions are available for registration now. We've got the links for you in the show notes, and those will cover all the essential calculus you need for machine learning. Calculus Level 1 will be on May 22nd, Calculus Level 2 will be on June 5th, and registration will open soon for Calculus Levels 3 and 4, which will be on June 26th and July 10th. If you don't

already have access to O'Reilly, you can get a free 30-day trial via our special code, which is also in the show notes.

00:30:51 It would be so easy for me at this point to say something that sounds like absolute bluster, but hopefully I've had, for people that have been listening to the show long enough, know that what I'm about to say is not hyperbolic and is not something that I would usually say all the time. What you just described, the kind of expertise that you just demonstrated, and the way that you articulated, I feel like I have to read your book, and I have 15 years of commercial machine learning experience, and I have already learned so much in the last few minutes that I feel like I've got to get it right now because who knows-

Sol Rashidi: 00:31:34 Thank you, Jon.

Jon Krohn: 00:31:35 ... what terrible trap I am walking into in my very next step and my next idea about an AI deployment?

Sol Rashidi: 00:31:43 Thank you.

Jon Krohn: 00:31:43 Yeah, so this sounds super valuable.

Sol Rashidi: 00:31:46 You're very kind.

Jon Krohn: 00:31:47 Something that I did pick up about your approach, so I already liked how you talked about a focus on high-criticality, low-complexity projects to maximize the odds of success on an AI deployment. Another thing that's really interesting to me is that from my understanding, you don't think that business value is the key marker to look at when choosing an AI project, which is counterintuitive. And we have had several episodes on this show with guests who specialize in helping you get business value out of AI projects and that's kind of the main point. The main point that they make is if you want

to have success in an AI project, it's got to deliver business value. And that's basically it. That's the fundamental bottom line that's been said on the show many times. And it sounds like you have a contrarian point of view.

Sol Rashidi: 00:32:39 I do, because unless you've done it, you realize how you could trip. And here's my point. I always say this, I'm like, "Strategy without proper execution is basic hallucination." I could dream, I could envision, I could articulate all the business value I want on a deck, and I do a [bleep] good job of it, but unless I can follow through and execute on it, it means nothing. And my word means everything. So if I'm going to say I'm going to do something, I'm going to do something, which is why I've been given all these opportunities. I am a woman of my word. So yeah, I can tell you that by deploying this, we're going to be able to reduce headcount. And I hate... By the way, there's a section on that one. We'll get into that in a second. But we can improve operational efficiency by 22%. We can increase productivity by 31%. We could expedite time to market by 11%.

00:33:40 If I'm the CEO of a company and we have a strategic initiative to be more EBITDA-healthy, and I need to raise my EBITDA by six points, all of those things matter. Which one do I choose first? Because I need to improve productivity. I need to be more efficient. I need to be more effective because the halo effect of those aggregated will create my six-point differential that I need to hit my EBITDA targets. Where do you start? How do you know which one you're going to execute the best on? You don't. Because if it was purely based off of business value as the hook, all three are really important.

00:34:23 So that's why I'm saying is there's the execution side that most theorists, most researchers, most folks that haven't had the responsibility or the accountability of pushing

something into production so that they could say that they did what they promised they would don't realize that the complexity to deploy needs to be a factor into the decision-making. So business value is important, but it's one of the 12 questions I ask before I determine how we're going to prioritize use case deployment because I'm going to choose the one that has the highest chance of probability of pushing into production. Otherwise, what good is a POC?

Jon Krohn: 00:34:59 Nice. Yeah, so that really is building upon the point that you made earlier about focusing on high-criticality, low-complexity projects. So that lower complexity is key to this project ultimately being a success, especially with a finite amount of resources. A really quick terminology term for people. Our business listeners will know this one for sure, our data science listeners may not, which is EBITDA. So earnings before interest, taxes, depreciation, and amortization. It's basically we're just saying net income, so a project being profitable, basically, earning more money than it costs to run.

Sol Rashidi: 00:35:35 Yeah. It's like the organizational marker of being able to do more with less. That's what EBITDA is. And so for anyone who's going to get... And you know what? Entrepreneurs and data scientists, if you start your own company, I know that when VCs are looking at you, they're going to look at logos, they're going to look at ARR, they're going to look at NRR. But when you're officially in a scaleup and you're going to get to the private equity world, they're going to start talking EBITDA language.

Jon Krohn: 00:36:01 Yep, yep, yep. I have, yeah, I've experienced that in the startup world, for sure.

Sol Rashidi: 00:36:07 You have. And a successful one too.

Jon Krohn: 00:36:10 A framework that comes to mind for me is the RICE model, which we see in product prioritization where you have four attributes that you evaluate any potential project that you could take on on. So the reach, the impact, the confidence, and the effort, where the broader the reach of this, say, AI project that you're thinking of getting together, that should be prioritizing the project more; the impact that that will have on those people that you're going to reach with this AI improvement, the bigger the impact, the higher the RICE score; your confidence in the project, C, so this allows you to have some projects that are going to have more R&D that have maybe more complexity, more unknowns, they should be lower confidence, and then that drags down your RICE score; and then finally, most important related to this complexity is the effort score, the E in RICE. And the larger, the more effort that a project takes, it dramatically lowers the overall RICE score for a given project. So I don't know if that's-

Sol Rashidi: 00:37:25 Absolutely. Very, very similar, and it's because of the RICE framework that I stopped doing self-service analytics as a capability. I learned the hard way the reach is not there. The impact is high for the small reach, but the reach has never been to the degree that we had hoped and you put in all this effort developing a data architecture and semantic layers and self-service capabilities and automating authorization authentication, and the juice versus the squeeze just isn't worth it, oddly enough.

00:38:00 Here's another one of my favorites as well. As AI... 2023, everyone was starting. 2024, everyone's really focused on scaling. And then there's this consistent theme around responsible AI, ethical AI, data privacy, data leakage. I don't think any of those things should be an inhibitor or a showstopper because I'm a big believer that if there's a will, there's a way. And there's an element in the book

where we talk about what the heck those things mean, but I think there's two things that also stand out. If you are a practitioner and this is a roadblock for you, or if you're a leader and you want to understand how to overcome this roadblock, or if you're an entrepreneur and you're developing solutions, I think this is going to be important for you.

00:38:51 There's this natural apprehension with an enterprise or just, I would say, any company that makes over $150 million, $200 million, it doesn't have to be enterprise, but mostly in enterprise about the what-if scenarios and, "What if our data leaks? What if our confidential data gets out there? What if we have proprietary data and it's not protected properly?" And I'm like, "Well, what if I cross the street and get hit by a car? What if I take a flight in any one of my travels and the plane doesn't get to the destination?" There is always a chance, but it doesn't mean that I'm never going to get out of my car or get out of my home and not walk across the street or never hop on another plane again because the odds and probability is low. But even so, there's just so many mitigation components that are out there, and there's some brilliant entrepreneurs that are working on solutions that I don't think data leakage or AI data privacy should ever stop anyone.

00:39:46 And here's an example. I know the topic of data privacy is like, "Whomp, whomp, whomp," eyes roll back, "Ugh, I don't want to talk about it." And I'm like, "Okay, well, let's just give me a second." You have bidirectional encryption. Encryption unfortunately is still a risk component when you're training LLM models with enterprise data because you can encrypt it on the way to the model, but you have to de-encrypt it in order for the LLM to be able to read the text and understand what you're fine-tuning on, what you're doing inference on, et cetera. So you can't use standard data privacy and data security practices with AI

applications. And I think this is the first mistake most people make. You have to dig and you have to research AI-centric solutions that are out there that have existed out there, but haven't necessarily been commercialized yet because we're two, three years into this mass journey of ours.

00:40:44 But one of the solutions, one of technologies, one of the companies that I've discovered that I've worked with is Protopia.AI, and it's a brilliant way of instead of... Anytime the CIO comes to me, the CISO comes to me or an enterprise, "Well, what about data leakage?" I'm like, "Well, no, we have a solution for that. It's not a problem." They're like, "Well, how is it?" I'm like, "Well, it's not our normal standard data security, data privacy. The field of AI is very different."

00:41:11 So in this particular case, we use stochastic mechanisms, which means... And it's, in a weird way, call it like a stained-glass transformation. I'm going to use encryption language because that's what most people know. You encrypt data, so you secure it, but then you have to de-encrypt it so you can analyze it. But with the stochastic modeling, what Protopia has been able to do for enterprises is you mask it, which is not the same as encryption, but you mask it. So John Doe, with their birthday, with their annual income looks like ABC_*123, but the LLM can read the masked version of the text, so you don't have to de-encrypt it, which is what you do with data privacy and security; the LLM model itself can actually read the masked version.

00:41:56 So it's essentially masked or encrypted on the way in, but you don't have to de-encrypt it, if I were to use data privacy languages, but in AI languages, you mask it and cover it. So if there were data leakages, if there were privacy concerns, you can't see it on the way in. But the best part is the LLM model itself can actually read the

masked information and you can do all the training and tuning and inference modeling you want. I say that because oftentimes when we're having those discussions of pushing things into production, inevitably months and months of conversation will go by with steering committees, with compliance, with risk, with a CISO, with the CIO, and there are so many solutions out there. Don't let the organization use that as a clutch or as a hook to not push something into production because there are solutions that solve for that very problem right now.

00:42:45 And so that's, for me, that's huge because that inevitably has always been the showstopper historically, but we have a lot of advantages, that there are solutions. If there's a will, there's a way. And if you just do some research and forensics, stuff like stained-glass transformations, masking data, Protopia and many other companies have solved those problems, so there isn't an excuse anymore, and I just want to make sure that people understand and know that. Things can happen at an enterprise grade.

Jon Krohn: 00:43:17 I totally buy it. We actually had a guest in episode number 701, Raluca Ada Popa. She's a professor who specializes in these kinds of encryption, decryption, masking, exactly the kind of stuff you were describing for LLMs. And so I've, since last summer with that episode, I'm like, "Wow, yeah, there is no reason why enterprise can't be adopting large language models and AI."

Sol Rashidi: 00:43:42 And if they're pushing back, it's because they don't know, Jon. That's the thing. It's so important. It's not that you have to be in the know because I can barely keep up with the pace of change, but when you're in the know or you've done it, you know solutions exist. So there's no reason.

Jon Krohn: 00:43:59 Great points. A point that you made a little while ago that you wanted to get back to but we had to put a pin in was

you were going to say something about reducing headcount.

Sol Rashidi: 00:44:08 So right now, I'm seeing a lot of decks of companies that I'm helping, and one of the promises to CEOs and a way to sell AI at scale is it will reduce your workforce by 28%, 35%, 16%. I call BS on that for a few reasons. I know it's a good selling point. And I think with right now the way the economy's going, every CEO is looking at their budgets and things are tight, right? There've been massive rifts, massive layoffs. I totally get it. I actually left my former employer when CapEx was cut by nearly 50%. It was insane.

00:44:57 But I have never, in my entire career, and I've never known a peer of mine in their entire career, I have never known anyone that has deployed AI into production where there has been layoffs or workforce reduction as a result of either efficiency or productivity. Because what always happens, at least in my organizations, is we reallocate the resources to the backlog of [bleep] that's been building up that we've never gotten to that is also important, but been de-prioritized because we just don't have enough manpower. And/or a company's growing in a particular vertical, product line, category, or market and headcount is frozen so we need to reallocate existing headcount to the growing vertical so that we can give it the attention it deserves and it can continue to grow in the double-digits.

00:45:48 And so I think it's also important that this fear-based aspect around AI taking over my job, guess what? If it does take over a job, it's on you. It's not on AI. It's because you haven't evolved. My role has changed every two to three years, and it is my job to keep the finger on the pulse and evolve with it. The role of a data engineer, the role of a data scientist, the role of a data architect, the role of a BPO in ERP migrations, our jobs change and you

need to change with it. So there's an evolution, and I think AI can complement and supplement, but it doesn't need to replace as long as you're continually learning and evolving. But scenarios where there's fear in terms of, "I'm going to get laid off because of it," more than likely you're going to get reassigned because of it and into something cool, potentially, or new, potentially. And if that doesn't excite you, I just don't know what would.

Jon Krohn: 00:46:42 Large language models are revolutionizing how we interact with technology. With companies rapidly adopting models like the GPT and Llama series architectures, the demand for skilled LLM engineers is soaring. That's why Kirill and Hadelin, who have taught machine learning to millions of professionals, have created the Large Language Models A-Z course. Packed with deep insights on tokenization, input embedding, transformers, self-attention, and LLM tuning, this course will help you gain hands-on experience with LLMs and stay competitive in today's job market. Enroll at superdatascience.com/llmcourse for your free 14-day trial. This course is exclusively available in the SuperDataScience community. You won't find it anywhere else. Once again, the link is superdatascience.com/llmcourse.

00:47:30 Yeah, especially if AI is taking away... Typically, AI is taking away something relatively repetitive, and so it's getting you into being reallocated to more creative, more impactful work, which you think most people would be happy about. This reminds me, talking about resources reminds me of something that you were about to start telling me before we started recording. And so I just had you put a pin in that as well, which is that when you are building out teams, you keep funding for data science and data engineering separate. Do you want to tell us about that?

Sol Rashidi: 00:48:04 Yeah. I think the field of data engineering is probably one of the most underappreciated spaces and probably the one that I adore, revere, and protect the most. And I wrote a post about this in LinkedIn once. I'm like, "Nothing functions, nothing happens without a data engineer." I don't care if it's a digital campaign. I don't care if it's a new product launch. I don't care if you're standing up a system so that you could sell in a new market. It could be anything. It does not happen without a data engineer because no business process can be enabled and no growth can be achieved without information, and information is derived from data, and it's all about making sure that data's in the right place at the right time for the right people. And who makes that happen? It's the community of data engineers.

00:48:55 I only have that appreciation because a long time ago, I was a data engineer. I accidentally fell into it. I think you and I were chatting about me going into professional sports and saying, "Okay, I need to grow up and take on a real job." I found my tribe and my community, but apparently I was a horrible coder. They were like, "You're not allowed to touch a code ever again." I was like, "Okay, so what do you want me to do?" They're like, "We don't know, but how about you communicate what we're doing because we want to do the work. We don't want to talk about the work." And I was like, "Oh, okay." So that's how I migrated from being a data engineer to translating what the data engineering team was doing. And that's where I gained an appreciation from it.

00:49:31 Moving the data, protecting the data, making sure it's of the right hygiene, the orchestration of it, the availability of it, like everything is because of a data engineer. I don't need a big team of data engineers. I need a lean and mean team of really great data engineers, and I protect them very, very much so because then when I hire data scientists, I don't want them doing data-engineering work.

Their job is mostly focused on the modeling, the algorithms, the predictions, next best actions, recommendations. It's what they can do with the information once it's in the state it needs to be in, but I don't want them playing with the mining, the cleaning, the curating, all that other stuff.

00:50:11 So I'm very respectful of crafts. So as a data engineer, you're a master of your craft. As a data scientist, you're a master of your craft. Now, of course, with the world of full-stack developers, we have back-end developers and front-end developers. Now we have full-stack and the two blend. And you can be a good full-stack developer, but how can you really be a master of both sides of the fence unless all you're doing is learning 24/7? I think it's very difficult, so I respect the division of labor and I let people do what they love to do without having to do the grunt work of things that they chose not to do. So I always try to keep the two separate.

Jon Krohn: 00:50:48 Well, it sounds brilliant to me. That sounds like the way to go, for sure. So yeah, keeping your data engineering, your data science headcounts separate, having that lean, mean team of data engineers ensuring that the data are of great quality for the data scientists downstream to be training and deploying machine learning and AI models with, that sounds like the way to go to me, for sure. Something else that... Well, we didn't say that we were going to talk about on air, but it's something that is very interesting to me is some organizations think that patenting isn't a great idea because you're just putting onto paper and in the public instructions for your intellectual property, and it's often difficult to be able to ensure that a competitor isn't using, say, some AI methodology of yours under the hood. How are you going to tell? But you have eight patents granted and then many more that have been applied for that are pending,

so Sol, what's the value in patents? When would you do that?

Sol Rashidi: 00:51:57 Like as a side hobby.

Jon Krohn: 00:51:58 Ah, okay.

Sol Rashidi: 00:52:03 I mean, the process of coming up with a novel idea, let's say you have a novel idea. It's not that someone else may not have come up with the idea before or components of your novel idea don't already exist; it's really how you put that together that creates that novel idea. Now, you can file a patent within an enterprise and an organization and they'll cover all your legal fees for you, but they technically own the patent, or you can do it on your own. But the process of distinguishing whether or not it's novel, paying the legal fees to file it, and then by the time my patents have been filed and granted, anywhere from two to five years because the Patent and Trademark Office is so behind.

00:52:51 Do it because it makes you feel good, but not because there's this higher altruistic intent behind it. Making money off of patents is unlikely because the fact that you discovering someone's using your patent, it's a different story, and it's money out of your pocket. So I think it's more for bragging rights, kind of like writing a book. It's amazing. Good experience. You could say you did it. You're not going to make money off of it unless you are literally a full-time writer and it's not going to be your first book. There's a second and a third and a fourth and a fifth, and that is your vocation, that is your career. So I would say patents is more for bragging rights than anything else at this point in time.

00:53:34 The one exception I would say is if you're in industrial or telco or manufacturing and pharmaceuticals, that's where it absolutely makes the most sense because things are a

bit more finite. Because a novel idea isn't in stitching together components that already exist that makes it novel, it's a molecule, a very specific molecular structure that leads to an output. You have a patent on that, guess what? You own treatment for pancreas cancer, which is a very, very specific type of cancer because you found the right molecular structure that has the highest probability of decreasing that tumor size. You're going to do well in the oncology space. Or in manufacturing, figuring out that one solvent that doesn't increase the heat coefficiency level of when machine piles actually grate against each other. People are going to have an interest in that, so they're going to want to buy into that patent because they also need solvents that consistently remove the heat coefficient level when two tectonic metal plates rub against each other. So there are certain industries where it can lead to financial gains. Otherwise, for us in the tech space, it's really, really hard to do anything financially with it. If anything, it's more out of pocket than...

Jon Krohn: 00:54:45 Another great example there of your cross-industry experience providing a lot of value to us as listeners. You really got in the weeds there around pharmaceuticals. So yeah, another great reason to be checking out Sol's new book, just out last week, Your AI Survival Guide: Scraped Knees, Bruised Elbows, and Lessons Learned From Real-World AI Deployments. I, for one, am definitely going to be checking this one out.

Sol Rashidi: 00:55:12 Thank you.

Jon Krohn: 00:55:13 Sol, before I let you go, I ask my guests always for a book recommendation, other than their own book. Do you have anything interesting for us?

Sol Rashidi: 00:55:21 I've got a goodie and an oldie. I don't know if anyone ever read Andre Agassi's book called Open. Now, I'm an avid

reader and I have seven books going on at the same time. And whether it's, don't laugh at me, but it could be about the Cambodian genocide, it could be about Business Made Simple from Donald Miller, it could be about the history of sex, it could be about feminine and masculine archetypes, it could be turning data into profit from VIN, it could be about... There's just a ton that I read. Massive, massive. I can't even count how many leadership books. But it was probably the first book I read cover to cover that I did not want to put down. And it's called Open, O-P-E-N, and it was about Andre Agassi's life. And it was interesting because-

Jon Krohn: 00:56:09 That's the one where he admits to smoking crack, something like that?

Sol Rashidi: 00:56:13 And wearing a wig. Andre, and most people probably won't know who he is anymore, but he was a really famous tennis player, but for those as old as I am-

Jon Krohn: 00:56:24 My goodness. That's crazy, if people don't know who he is. He's incredible.

Sol Rashidi: 00:56:28 Yeah, he's amazing. But you saw him from the outside and when he was dating Brooke Shields and he was a phenomenal tennis player and he does a phenomenal job of telling the story of how every day he was insecure when he went on the court and how his relationship with Brooke Shields was the most horrible relationship he'd ever have because he really was in love with someone else, but because of reasons that he wasn't aware of, he stuck with it. But then also, going bald at such an early age and then having to wear a wig because he created this persona of himself and then having to keep up with the image.

00:57:06 It was probably one of the first books that was really open, hence ha, ha, and vulnerable about we all have our

own insecurities. No one is perfect. What we see really isn't that person and that intent. There's a lot to unpack. And so it was just the first book that, to this day, I still remember the author, I still remember the title. And I remember I was traveling in Europe on a Eurail and I finished that book just on that train. So it's an oldie, but it's phenomenal.

Jon Krohn: 00:57:37 Nice. And so when you said you have an oldie and a goodie, that was one book-

Sol Rashidi: 00:57:42 Oh, that was both.

Jon Krohn: 00:57:44 ... that's both an oldie and a goodie. Okay, I won't wait for a second one. I guess it wouldn't make sense to have an old recommendation that wasn't good. You're going to have an old bad book and a new good book. It doesn't make sense.

Sol Rashidi: 00:57:53 Yes. It's true.

Jon Krohn: 00:57:55 Nice. Open by Andre Agassi. Very cool. I think that also probably plays on... It's a double entendre with him being open, but also performing in the US Open, the British Open. Yeah.

Sol Rashidi: 00:58:07 Oh, 100%. 100%. And just the amount of discipline and rigor that went into him being a master of his own craft, I just had a ton of respect. But the insecurities that followed with it, and I know we all have it, so it was just... I don't know. You would never have expected it from someone like that, so it was refreshing.

Jon Krohn: 00:58:23 Yeah, it is great to be reminded that for all the amazing things that you see leaders do out there, behind the hood, most of us are shaking in our boots, feeling like we have no idea what we're doing.

Sol Rashidi:	00:58:41	Totally, totally. And even if we do, we're always surprised with how much we don't know.
Jon Krohn:	00:58:45	And actually, I would venture to say that the few people I have met in my career who don't have that kind of fear, they're most likely to be the kind of person that you described right at the outset of this episode, to bring things back, that are climbing their way up the corporate ladder with skill sets other than IQ.
Sol Rashidi:	00:59:08	With color. Yes, yes. There's some overinflation and exaggeration and posturing that goes on, but you can spot those out. If you pay attention to your intuition, you can tell in a heartbeat.
Jon Krohn:	00:59:24	It's easy, Sol. You just slap AI on it.
Sol Rashidi:	00:59:27	Yeah, powered by AI.
Jon Krohn:	00:59:32	AI can do anything.
Sol Rashidi:	00:59:33	So easy. Just powered by AI. Just powered by AI.
Jon Krohn:	00:59:37	Yes, yes. All right, so glad to be able to get back to that point. Sol, this has been an amazing episode. I wish I had more time with you.
Sol Rashidi:	00:59:48	Another Summit at Seas.
Jon Krohn:	00:59:51	Well, yeah, but I mean also on air. Hopefully we can get another slot booked with you in the near future because I feel like we really just scratched the surface of the insights you can provide on the show.
Sol Rashidi:	01:00:02	Yeah. I think you have an opening for podcast number 918 or 923.
Jon Krohn:	01:00:08	I'll mark it down.

Sol Rashidi: 01:00:10 Yeah, thanks. I love big numbers.

Jon Krohn: 01:00:16 Well, really appreciate it, Sol. But yeah, before I let you go, I do have to ask you how our audience should be following you to get insights between now and episode number 918.

Sol Rashidi: 01:00:30 I do have a newsletter, solrashidi.substack.com. I will post some real nitty-gritty stuff. It's very transparent, it's very direct. I just got into the space by the way, so I'm trying the content stuff out. But I've gotten some really good traction, which is great. LinkedIn is my primary post. I'm so sorry, I'm not an IGer or TikToker, but LinkedIn, and the newsletter are the two primary forms.

Jon Krohn: 01:00:54 With our audience, we're used to hearing LinkedIn as the most common social media platform today, so you have nothing to apologize for.

Sol Rashidi: 01:01:03 Well, thank you. I so appreciate being on this, and congratulations to your success, Jon. You've been a phenomenal entrepreneur, and I mean, just to have the tenacity of doing... I know you've got over 700 podcasts and you've done over half of them. Kudos to you. You've been at this game a long time and you're still showing up and you're still showing up, engaged and committed, and that makes me happy because the fatigue hasn't set in because you obviously do what you love and that matters a lot.

Jon Krohn: 01:01:30 Well, thank you, Sol. Yeah, it is easy. With all the other things going on in my life outside of the podcast, it is always easy to stay motivated about the podcast because I get to have time with someone like you and get to interview you and get these amazing insights. So it's invaluable to me and it's awesome that people enjoy tuning in and listening in. It's like an added benefit on

the side almost. All right, Sol. Catch you again in Episode 918. We'll see you then.

Sol Rashidi: 01:02:02 You got it. Take care. Bye.

Jon Krohn: 01:02:06 Well, I really do hope we can get Sol back on the show again soon. In today's episode, Sol filled us in on how CDOs and related roles have such high turnover because there's no clear division of relative to CIO and CTO, they're brought in to fix data governance and quality issues that the enterprise doesn't have the right culture to fit, and back-office, high-IQ people get outflanked by other smooth C-suite execs. She also talked about how high-criticality, low-complexity AI projects are the ones with the highest probability of success, how enterprises with greater than $100 million in revenue tend to have what-ifs around data security and privacy that could be overcome today with straightforward technological solutions like Protopia's stained-glass data-masking solution, and she talked about how having a lean, mean team of data engineers ensures that data scientists downstream get high-quality training data for their models and they don't get bogged down by data engineering work.

01:03:03 As always, you can get all the show notes including the transcript for this episode, the video recording, any materials mentioned on the show, the URLs for Sol's social media profiles, as well as my own at superdatascience.com/781. If you'd like to engage with me in person as opposed to just online, on May 17th, I'll be hosting a panel live at the New York R Conference. The panel will feature iconic open-source community members Drew Conway, JD Long, Soumya Karla, and Jared Lander. There's always pizza and beers afterwards so we can catch up over a cold one then. Huge names like Hadley Wickham, Andrew Gelman, Hilary Mason, Wes McKinney, and Sean Taylor will all be there. That's such a

crazy lineup. The New York R Conference is one not to miss, regardless of what programming language you do data science in.

01:03:51 All right. Thanks to my colleagues at Nebula for supporting me while I create content like this Super Data Science episode for you. And thanks of course to Ivana, Mario, Natalie, Serg, Sylvia, Zara, and Kirill on the Super Data Science team for producing another jaw-droppingly awesome episode for us today. For enabling that super team to create this free podcast for you, we are so deeply grateful to our sponsors. You can support this show by checking out our sponsor's links, which are in the show notes. And if you yourself are interested in sponsoring an episode yourself, you can get the details on how you can do that by making your way to jonkrohn.com/podcast.

01:04:26 Otherwise, share this episode with someone who would love it, review it, subscribe if you're not a subscriber, and all those kinds of good things. But most of all, just keep on tuning in. I'm so grateful to have you listening and I hope I can continue to make episodes you love for years and years to come. Until next time, keep on rocking it out there and I'm looking forward to enjoying another round of the Super Data Science podcast with you very soon.