

Sliding Windows live in Antwerp - Chrissy LeMaire, Thorsten Butz - PSConfEU 2024

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Long Summary

In this special episode of the Sliding Windows podcast we broadcast live from the annual PowerShell conference PSConfEU that took place in Antwerp in 2024. My guest today is one of the best known celebrities of the PowerShell Universe: Chrissy LeMaire, inventor of the DBATools, Manning book author and Github star - to just give a few examples of her highly acclaimed work. Chrissy comes from a Cajun family in Louisiana (USA), whose French-speaking ancestors still have a special influence on the culture of this region today. Chrissy has lived and worked for many

years in Europe now, embracing the the richness of cultures and influences in different countries and regions. A little different from a regular episode, we talk less about a specific area of expertise. Our main topic is Chrissy's career from database expert to book author and social media star and her very special view on the future of IT. Of course, we talk about "artificial" and "human intelligence". Chrissy shares a pivotal moment in her academic journey inspired by a quote from Paul Dressel, catalyzing a transformation in her approach to learning and paving the way for academic excellence. Transitioning to Chrissy's professional narrative, the dialogue navigates towards her engagement with PowerShell projects like DBA tools underscore her ardor for technology and perpetual learning. Steering towards technology's cutting edge, the dialogue unfolds the speaker's exploits with PowerShell and SQL Server migrations, elucidating the journey of crafting modules and scripts to streamline migration processes. Discussions on Microsoft's support for DBA tools, GitHub collaboration, AI integration with PowerShell, and the exploitation of AI engines like GitHub Copilot, underscore the transformative potential of AI in ameliorating workflows and augmenting productivity. Alongside nuanced reflections on Cajun heritage and language intricacies from Louisiana, the episode culminates in a jovial French language quiz and a toast with craft beer, emblematic of shared ardor for technology, culture, and the enriching exchange encapsulated throughout the conversation. Thanks to Geoffroy Dubreuil and James Ruskin for their support with the Monad Manifesto quiz.

Brief Summary

In this special episode of the Sliding Windows podcast we broadcast live from the annual PowerShell conference PSConfEU that took place in Antwerp in 2024. My guest today is one of the best known celebrities of the PowerShell universe: Chrissy LeMaire, inventor of the DBATools, Manning book author and Github star. Our main topic is Chrissy's career from database expert to book author and social media star and her very special view on the future of IT. Of course, we talk about "artificial" and "human intelligence".

Tags

PowerShell, Chrissy LeMaire, DBA tools, Monad, PSConfEU

Transcript

[0:00] Music.

Introducing The Sliding Windows

[0:07] Hello to yet another episode of The Sliding Windows. Good to have you all here live in Antwerp. Hello! Woo! Woo! I'd say the audience is already tired for a couple of days of conference. So, it's so good to have you here. I started this little project, Sliding Windows, I just recognized more than 10 years ago. Wow. And the first episode when I did that -that was with more or less a friend and a colleague of mine, Rolf Masuch - so greetings if he listens to us. And the first topic was

PowerShell. But that was not intentionally. That was simply, we were excited about that. And so that was the first one. And then, that's a little side story that I never told.

[0:59] Then I reached out to June Blender. a great hero a well-known expert of the PowerShell team back in those days. She did a lot of technical stuff, technical writing but due to some appointment issues the schedule didn't work out so we had to postpone that and we postponed that until today. So June if you listen to me now, the invite is still open. I'm looking forward to meet you one day to do that so and then, I recorded a couple of sessions with various topics. And then I met Bruce, 2016, in Hanover. And I think that was the second that I recognized sliding windows will be a lot about PowerShell. So, okay, that's not too bad, isn't it? But that is the reason why it's not named PowerShell Podcast or something like that. That is owned by a colleague now. And I'm still open for different topics. but the most important thing in my life became PowerShell. And if you think about it, if you do something like this, it's obvious that one day you want to do that with a live audience.

[2:16] And then you think, who can I invite? Who will come? Have a look at the script! I couldn't decide that. So I ask PowerShell, who is at the same time outstanding in his or her experience and knowledge and, very important: entertaining.

A Journey Through PowerShell

[2:39] So, and that is what PowerShell gave me. Thanks. So let's say hello to my guest today, Chrissy LeMaire. Thank you so much. Thank you for inviting me on the podcast as well. I'm blown away that we can do that here. So thanks to the organizing team. It is not my decision that I'm here. You might think that is a bit crazy. He put himself on the stage. No, I asked if we can do that, if anyone is interested. And I'm very thankful that I can be here and that you're here.

[3:14] There is one thing, we know each other now quite a while in that PowerShell space. There is one thing that I'm really jealous of. May I say that? Have a look at the badge, at the flag. Chrissy, first question. How did you manage to get the European flag? You're the only one who deserves this honor. Please explain. I think, well, first of all, my last name is LeMaire.

European Dreams and Departures

[3:40] And I feel European, even though I may not be from Europe. Well, my ancestors were. And so I felt that it was a proper representation whenever they put, you know, know the American flag there that is where I'm from originally in Louisiana but it didn't feel like it resonated I had been here for so long so I asked Gael if he would use the European flag instead and he said yes and it just feels good it feels right I mean that photo was taken in Mons Belgium where I lived for eight years and I feel like that's my second home, It's a bit of a sad story, if I got it right. Correct me if I'm wrong. You're leaving the European Union now, or you already left towards the United Kingdom. Is that true? It's something that I would like to do.

[4:32] That's not Europe anymore. Have that in your mind. I know. That is a sad story. But yeah, I, you know, my wife grew up reading all of those, all like the British books. And she really loves

British culture. And I've been very fortunate to have somebody who's very supportive of me moving all around to, you know, work at whatever job that I want to move to Germany. I was here in Belgium. And so the next place that she would like to go is the UK. And in 2017, I actually went to Glasgow and absolutely fell in love. There's this artist named Paolo Nutini that he is one of my favorite musicians. And he's from Paisley, which is just outside of Glasgow. There's actually a tweet that I put up whenever I was there. It was a picture of some poutine. If y'all ever eat poutine, Lee Holmes took me to Vancouver and introduced me to poutine. So I was in Glasgow. Weird place, I know, for some poutine, but I got it. And, you know, I was sitting there and they had those like classic UK buses driving by, some great beer and poutine. And I took a picture and I said, I'm moving to Glasgow. And so that is on the agenda. I don't know if it'll be Glasgow exactly, but if anybody has any suggestions, I'm open to it.

[5:57] But you've recognized that they have kind of different English. You're aware of that, right? You know, I'm used to, I think whenever people actually speak American English, it's confusing for my brain for two seconds because every bit of English that I hear generally has an accent to it. And so actually, Jordan Boreas, I thought that he was American. And so I was prepared for the American English. And then it almost sounded like a completely different language. And I was like, wait, where are you from? And it is interesting how our brains do that, like what we're prepared for. And so I wasn't prepared for him being Australian, though I am familiar with their alternative English.

Roots and Influences

[6:41] We will come to that back later. Keep that in mind. So just right now, you're living in Europe for quite a while, but you originate from the United States of America. And keep that in mind. We will. You will see. Okay. The first thing that I always ask is, what are the roots? Where do people come from? I'm one of those guys. Yes, I love to look at the future, but I am convinced that to master the future, you have to be aware of your heritage, where you come from.

[7:17] And since we know quite a while, and of course we chat a lot, you told me that a quote by Paul Dressel really influenced your life. Yes. And to give it for those who listen, I can quote that. It says: "A grade is an inadequate report of an inaccurate judgment by a biased and variable judge of the extent to which a student attained an undefined level of mastery of an unknown proportion of an indefinite amount of material." I apologize for my rubbish English, but you can look it up. Would you be so kind to explain a little bit, what did you do to become the expert that you are today?

[8:02] So whenever I was in high school and growing up, I was not an A student and I actually wasn't even a B student. And it really made me feel like success maybe wasn't a possible part of my future. And but I went to I went to college anyway, and then I took a sabbatical and When I went back Right before I did I I saw this quote and it completely changed my life because All this time I had been carrying this weird burden I can be good at work, but I can't be good in academics and the thing about being graded is that it is.

[8:52] It is strict. There are rules. It's a rigid thing. And if, you know, if Beth Broussard gets an A and I don't, it's the same grading scale. And I didn't deserve that A. And whenever I saw this, it changed

my life entirely because it made me realize that it's true. It is a biased and variable judge. That teacher might like somebody else a little bit more. And all this time, I thought that it was almost like a scientific measurement. And so I actually went back to school. I was working at a law firm in San Diego, California, and I loved it there. And I was doing really well. And whenever I was, I was older, so I was going back to school and I I was like, maybe my teachers will actually like me this time. So I go and I just irritate all of my professors. Like, what the hell? So I actually asked my boss, I said, hey, you like me? And she said, yes, I do. I said, my professors don't. And she said, oh, I know exactly why. And I was like, what? And she said, you ask questions.

[10:05] And those questions help me answer business problems. Problems but when you ask that professor they take it as you questioning their judgment so i'll challenge you to do one thing and this is going to get your grades up i was like all right that for your next report just say something kind of flattering and don't push back don't ask any questions and watch what happens and i am not exaggerating when i tell you i wrote a report about, it was called Ethics for the New Millennium by the Dalai Lama. And in the report.

[10:44] I was genuine when I said that the book had a profound impact on me because I was living in San Francisco by this time and I was feeling very lonely. And this book helped change my perspective and made me feel less lonely. So I included it in the paper as well as, you know, kind of like a thank you for assigning me this because it was very beneficial. I learned so much. And when I got my grade back, it went from like a B to an A+. And I was like, oh my God, you can hack your grades. And when I realized that you could hack grades with behavior other than, I don't know, I guess what you put on paper, the way that you study, then from that day on, I only got A's, which I think is crazy. But this helped me see that possibility along with my boss, who was encouraging. And ever since then, all of my professors pretty much like me because I stopped asking questions.

Migration and Family

[11:48] You said that your family had a kind of European background. So the name is telling.

[11:57] There is always, you know, it's a great, it's a lottery, it's a randomizer that puts us on this earth and you can be very, any one of us can be very thankful having the right parents, caring, the right country with a good health system, stuff like that. But you decided that you're interested in going to Europe. And I think maybe you want to explain a little bit, what does that mean to your family or your partner or something like that? Was that by granted that you do it or was that a really hard process? Because if I'm thinking about migrating to the United States, that would be a challenge for me. How was that on a personal and a family level? Well, first of all, at the time, health care didn't even cross my mind. And I will be honest, like health care and going to the UK is number one or two on the list.

[12:53] But back then, actually, I wasn't that young. Whenever I moved here, like in my head, I'm like, I'm gonna tell this story about back when I was 18. But back when I was 18, I went to the movie theater in Columbus, Ohio. It was called The Drexel. And I watched this movie that was based in Italy. And I was like, one day I'm going to get there. But I didn't put a timeline on myself. I

just said, you know, when it happens, because it will. And then many years later, I was living back in Louisiana. I had moved from California. And this company called and they said, hey, we want you to work in West Virginia. And I was like, absolutely not. But then they're like, how about we pay you more than you want and you get to work in the security operations center of the largest network in the world doing SQL Server. And I was like, that's pretty tempting. So I went to their careers page and I looked to see if they had any international positions and they did. So I accepted that. And eventually I knew that I didn't have to stay there, that position forever, and I would be able to go to one of the international ones. But as far as when it comes to my family, I think.

[14:12] My family, while we grew up all very close, whenever we all grew up and we were over 18, each of us moved to different places. And my mom always said something like, you know, whenever you're born, you get roots and wings. And so she was always very encouraging of moving away. way. And so, you know, while it's always sad to see your family go, it was also, for me, I didn't even think twice about it. And I've always been, I was surprised when there was somebody that I was dating. I was like, hey, you want to move from Louisiana with me to California? And they're like, oh, I'm scared. It didn't even occur to me that anyone would say no to such a huge opportunity. And the thing that's very natural with my wife, Lou, is that I was like, you want to go? And she's like, absolutely. So it has been very easy to move overseas. And, you know, you miss everyone at first, but I was also used to missing people when I was in California.

The Rise of DBA Tools

[15:19] The Internet does help. Yeah, as we see on the picture here, for those who are listening, we have a look at the DBA tools book by Manning, we just mentioned that. If we do jump into your professional career, it's obvious that many people know you from the PowerShell context, but even more, you are, are you equal DBA tools? But that is not the truth. There are many, many other people involved. But I guess it's fair to say that you became visible with DBA tools on a very broad level. You mentioned already SQL Server. Can you tell a little bit about the beginning of the project? In the beginning, was it just you? How did that all start? And what was your influence?

[16:12] So first of all, I think it's so funny. There's some things that you never quite think about. One of the things is I wanted my GitHub name to be CTRLB. It was a hacker name that my wife gave me because I'm bold, but it wasn't available. So I just changed it to Potatoquality because who's gonna care and who's gonna see this? And same with this picture. They gotta wash my hair in like three weeks. It was during the pandemic. And I was like, here's my picture, cover my face. And so anyway, it's funny that this is the one that's featured.

[16:52] Started using Linux back in, I would say like 97, 96, 97. And with that, I had always wished for something similarly powerful on Windows. And the closest that I found was VBScript. So I started doing like classic ASP. And in, it was awesome. In 2005, I was living in Los Angeles. Oh, by the the way, you're probably like, man, you move around a lot. It was true, but my stability came from the law firm that I was working for because we're a California-based law firm. So I just kept moving to all the cities that we were in. But while I was there, there was the Los Angeles Professional Developers Conference by Microsoft, which I think is now called MSBuild. And I went

there and Lee Holmes was there and Jeffrey Snover was there presenting. That's whenever me and Lee became friends and he later took me out for poutine because I had made him a gumbo. I invited him home that night and I made him some gumbo.

[17:57] And eventually he was like, hey, why don't you help me? You know, you could be a technical editor for the PowerShell cookbook. And I was like, I don't know how to use PowerShell yet, though. It's this weird concept that I really can't grasp, especially coming from a VBScript background. I was like trying to put all my VBScript understanding and T-SQL understanding into PowerShell and it just wasn't working. So I read through it. But for me, when I learn, I need a project that keeps me completely engaged and excited. And that didn't happen until 2011 whenever I was working with SharePoint. So I do love SharePoint. It got me into PowerShell. um and so you learn more or less powershell with developing the behavior tools is that a way to describe that not yet no um that actually so that was 2011 but in 20 it was 2014 that my best friend brandon he's the one that i'm writing uh the the book with the ai book with um brandon said hey i want to show you something and he imported the the sequel management objects dll and they had all of these options that are recognized. And I was like, oh my God, that looks so incredibly powerful. But whenever you do that.

[19:19] And that's not how you use it. But I kind of saw it as slow. So it took a bit to come around. But now I remember why you asked that about SharePoint. Because I was doing SharePoint at the time. And my company came to me and they said, hey, we need to do a migration. And I was like, oh, that's no problem. Because somebody's written a PowerShell script that'll just go through and migrate from one SQL server to another. And that didn't happen. And so I was like, so every, you know, all of the code snippets out there had static paths. And so I made it dynamic. And, and it kind of went from there. I, at the time when I was building the module, it was not a module until one, I had so many requests, can you please put these like seven or eight commands into a module? And I'm like, I don't get why you want to like run a command to run another command, why not just run the command? Because I came from that Linux background, you know, where you just do .slash and script.bash, whatever. And so it was here at SQL Days Belgium. I made it into a module and then presented it because I desperately wanted other DBAs to be relieved of having to do these super boring migrations and just use PowerShell.

[20:38] Does microsoft support DBAtools the way that you think it deserves the word support yes.

[20:49] But um they have given it's been awesome uh i worked with them and asked them hey um at first i think i told yeah we would tell them people hey install sql server management studios so that you get these DLLs, and then... And then you can run these scripts. And then I asked Microsoft, I was like, can I just include all of SMO? And they were like, take everything that you need. And yeah, in so very many ways, they have been extremely supportive. The only but is that it'd be really nice to be paid full time to work on DBA tools. I could do that all day and night. And so there's the but. But all around, I have felt they have supported us as a community. They gave us, they actually awarded us \$10,000 for, we were the FOSS recipient award for, I forget the exact name of the award, but each month they give \$10,000 to an open source project and that was us. So I took it and distributed it to a lot of the contributing team members. And then also GitHub has been supportive of us as well, and also supportive of me personally.

[22:15] So Microsoft has absolutely contributed to the success of DBA tools.

GitHub and Microsoft Transformation

[22:22] I think GitHub is a kind of transformative change for Microsoft, isn't it? Yeah. I was just joking with Bruce that one day, he told me that, Bruce Payette told me that, as a side note, he met Linus Torvalds. And I was joking that one day in the future, Linus Torvalds will be described as the guy who invented Git. And some people will say, okay, he did something else. Yeah, okay, nice to have Linus, Linux. And in terms of Microsoft, when they took over GitHub, very, very people were, wait a second, Microsoft, that freaking evil empire from Seattle, we don't want it. But today we see some people left, but way, way more people came in to GitHub, and GitHub evolves. And somehow I think I always describe it as Facebook for nerds. It is so much more than Git. And I know that you're pretty proud of being a GitHub star. Is that called? How does that come? And there are not so many, right? I don't know the exact number right now, but what was really incredible is it was during During the early days of the pandemic, they had reached out and they said, hey, we're starting this new program. It's called GitHub Stars, and we'd like to invite you to be one. And I was like, oh, my God, this is huge.

[23:44] So I was actually one of the first seven GitHub Stars, along with some famous people that I don't remember their names because they're in completely different fields. But what I really liked about it was as a member of the PowerShell community, I often feel left out whenever it comes to documentation out there. I was so shocked whenever GitHub Copilot supported PowerShell so beautifully. And it was very nice for PowerShell itself to be recognized as part of this GitHub stores community because it can be niche. And yeah, it was really cool.

[24:33] What are the things that you like most? Because I got to confess, the inner core of Git, that can't be the decisive point because then you can use GitLab or whatsoever. Is there anything that you think you're especially addicted to? I give a brief example. I tried to set up quickly a webpage with Hugo and GitHub pages that has nothing to do more or less with Git. That was a blast. I never created a SSL certificate that fast with Let's Encrypt and that changes all the time. It's a blast. Is there something like that that you especially like in GitHub that does not so much to do with Git at its inner core?

[25:21] External periphery so you're probably talking about something like the communities um i i do love the way that it allowed other people to come into your projects and interact that way um but i'm kind of distracted by my brain saying github desktop because i i know that it's It's not Git. Sorry, I know that it is Git, but it's also something that I love, user friendliness. And while I do create command line tools and I enjoy using command line tools and also love them, I also sometimes I just want to get something done. Like I still use SQL Server Management Studio sometimes. And I loved GitHub Desktop because I still don't know Git. I never plan to learn it, but I can interact so completely. And I could say that I'm super confident in being able to do source control. And I don't have to know all the guts down at the bottom because they created this GUI that's fun and easy and pretty.

The Future of DBA Tools

[26:31] Rumors say that Microsoft bought it - from today's perspective - simply that they can run their own stuff in it and make it guaranteed that GitHub will exist in 10 years, in 20 years. So that gives you another point of why did they invest so much money in something that they easily could set up because it's open source without that platform. For him. But you can see the surface of Microsoft changed a lot because many people are addicted, not with Microsoft directly, but they do love stuff like GitHub. There are other examples for that. But to me, to come back to DBA tools, somehow the SQL Server team, maybe they listen to us, to me it's kind of the old Microsoft. SQL Server is not a cheap product. Don't you think it would be, is it fair to say that something like DBA tools, a deep PowerShell integration, should simply be part of SQL Server? It is. Going back 20 years or 10? Going back. Yeah, you know what I mean. Without the necessity to have volunteers that are filling the gap. You know what I mean.

[27:57] You wouldn't be here. That's the other side of the fence. But if you do not think about yourself, is the integration that SQL Server provided, is that good enough? No. I don't think so. No, I don't think that anybody did. Even whenever we tell people to execute PowerShell, we say not to use the PowerShell subsystem. And maybe that's changed over the years, but I didn't keep up and nobody brought it to my attention. So I still go to dbtools.io slash agent whenever I set up any PowerShell jobs because we use basically command.exe to execute PowerShell.exe. And we do not use that integration function.

[28:48] And so I, you know, it's something that I just, I guess I don't wish for anymore. I did at the beginning, but it did create an opportunity, not just for me, but because people were so excited by DBA Tools, they also pushed through and got involved in GitHub, which is also what got me on GitHub. Hub like before and I would go around telling people like I know that it's well I created dba tools.io because I didn't want to force them to get hub and then find the green thing where they could like download the zip and it was so confusing in that way but it got me there and it got me involved and it made it very easy to help get others involved and because I had that that background with Linux going back to the 90s, like I did always want my worlds to come together. And that happened, you know, with PowerShell, and with SQL Server, and with open source and with Linux, and now PowerShell runs on Linux and SQL Server runs on Linux. And so everything came together perfectly. And so I would have to say I'm very satisfied with their level of integration of PowerShell and SQL Server because of the way that everything turned out. The final question to DBA too is before we go further to what you do today, what you're going, what are the future plans?

[30:14] Last question is, what are the future plans for DBA tools? Is there something like a giant leap or the responsibility that will change? Is there anything or it's just stability and improving the tools and let's see what may come? What's amazing is that it's almost been around for 10 years, for an entire decade. And right now it is stable, but I don't know about you all, but for me, I'll be like super duper into a project and that's all that I work on and I'm completely obsessed with it. And then I'll be super disinterested. And then I'll switch to another one. And right now, I'm really interested in AI. And I don't, I'm not actively developing DBA tools unless I need something. But I do go in and, you know, approve the pull requests. And I do the, every time that the module is published, that's me

because they forced us to have this physical key to sign our modules. But something that I did do that I really love is now I kind of see it as a teaching tool. So DBA Tools, so many people have said DBA Tools helped me get into PowerShell. Whenever we first, whenever like DBA Tools first came out, I got so much pushback from the SQL Server community. They're like, oh, I hate PowerShell. And I'm like, yeah, but watch this. And, and.

Embracing PowerShell and Open Source

[31:44] So, you know, we got people into PowerShell. We got people into GitHub and open source. And now I have dbatools.ai that is not a commercial product because I don't know how to make money writing software. But this will help the PowerShell community see how it does. You don't need a PhD. You don't need to be a data scientist. You heard that we were talking about accents. My mouth is dry. So you're going to hear my Cajun accent. I'm kind of tired. But you don't need to be a data scientist to use AI. We could do it as PowerShell people. It's all REST API endpoints, which is shocking to me. But that project shows you, I even did this mermaid workflow that I used AI to create. But I walk everyone step by step on how to bring natural language to your module. So now you can say, can you copy the Northwind database from SQL 01 to SQL 02 using this path? And it will execute the command for you. It'll interpret that and know how to write it out.

[33:00] You already mentioned artificial intelligence. Yes. And that is anyone who follows what you do, You're very outspoken, so it's easy to say, oh, Chrissy's got another interesting project. She delivered another interesting session. And despite the fact that artificial intelligence is already a buzzword, and you have to be very careful who talks about that because anyone talks about it. I think artificial intelligence is a break. A break? It's a break, a new, a giant leap forward, a change for what computing, computer science is. I get some nice picture from you.

[33:45] It starts, it might start with something like that. That was me. Pictures showing up all over the places This is generated by artificial intelligence. Let me start with, again, one thing that I observe.

[34:04] Artificial intelligence is kind of technology that is based on what already exists. It's the models we have today. Heavily, they collect data and they get information out of it. Yes. So it's like a giant leap in a search engine. So that is what I very often describe if I think about the search engines when they showed up or something like Wikipedia, that was a transformative change again. So AI is. But AI seems to have superpower because AI can be trained, you can level it up, and it goes on and on and on. Will you be so kind to tell a little bit about your experience with AI engines that you already had, what you are interested in, and your perspective on where will you be in a year, in two years, what fascinates you today, what will fascinate you tomorrow? Well, I guess the thing that's fascinating is, first of all, that it's all just REST API endpoint. point. Another thing is.

[35:20] Man, I totally forgot what we were talking about. Sorry. It takes your time. Would you say again, can you repeat the question? Yeah. With your, have a glass of water. Thank you. Artificial intelligence is a vast topic. So, and it already became a buzzword. So, what are the things that fascinates you most today? What do you like to do? Something like that? Funny things? No. I

mean, that's just a means to an end. What I really like doing is figuring out how to use it to make my life easier. And it's fun exploring things that I've kind of heard about on the peripheral, because even though I'm a SQL Server DBA, I am not a data scientist. And so I hear things like fine tuning that I use PowerShell to like you were talking about training those models, you can actually keep training them with PowerShell. And I wrote this thing called fine tuna that I did make a cute little logo with and it just got just knocked out the park.

Exploring GitHub Copilot

[36:30] So the thing that fascinates me is how to make our lives easier with it but most of all how to integrate ai with powershell so that we all can be in this in in the game that is clearly the future of the entire computer industry um do you have good experience with co-pilot as a product i do For example, also the GitHub integration, something like that, yeah? Right. So GitHub Copilot, first of all, man, whenever it first came out.

[37:05] I had this function called isWindows, and it was written within DBA tools.

[37:12] And I couldn't believe when I opened up a new tab, and I typed in I, and then it just did isLinux. And that was absolutely magical.

[37:24] But then it kind of got in the way after a bit, and I turned it off. But, you know, then I returned to it. Now I actually leave it on all the time, and I use it for all of the tedious tasks. And what I love about Copilot is that whenever we're building something, we all have to make those, you know, the little for loop. That's just, it's not exciting, but you have to do it. So I just make the comments and then it fills in the rest. And a lot of times, okay, that's what actually adds like really good parameters and really good help. And then there's the chat on the side. But I've never, like, I wanted to be a fan of this chat whenever I saw it in practice. Practice first of all it matched my really beautiful 1984 unbolded theme it looked good it was slick as heck but i was like when we're you know uh which the lat what's the last version of dba tools that that you're familiar with and it was like point you know 0.9 and so i didn't see how i could use it but they do have these extensions um that are now in preview that's That's awesome. And I, oh my God, I used Claude and ChatGPT to write an entire VS Code extension in TypeScript. And what it does is it goes out to either Azure OpenAI service, or it goes out to the OpenAI API, it gets a list of all of your assistants.

[38:46] And then you can have an assistant is, it's like an updated copilot with like all the data that you have. And so what I can do is ask just Copilot, what version of DBA Tools do you support? And it's like 0.9. And then I say at assistant, and I talk to my assistant, and it's the DBA Tools assistant, and it's the newest model. So now, whenever that is available for everyone, then we'll be able to integrate our AI assistants with Copilot. And that solves all of the problems that there's going to be for me that I had with Copilot Chat. And so now I won't have to change context because right now I am going here and going there. And I leave VS Code so that I could go and get big old chunks of code, either from Claude or from OpenAI.

[39:41] It's obvious that AI technology can remove a lot of burden from our daily life. Yes. And just talking to your phone, which is a bit ludicrous still. I love that, yeah. But if you tell the device, show

me all the pictures from PowerShell conferences throughout the years, and let's find Chrissy. And that worked before, but it's on a complete different level with AI technology. For me, as a non-English native, my first example is always something like, this is not an advertisement, but I have to mention it explicitly because it's so great. Something like deepl.com, which is a German company.

[40:28] And I was so frustrated with the automated generated translation that were provided in previous years. And since technology companies like DeepL are in town, they are way better than I am. So, for example, if I write something, I very, very often use it because it makes my language better. And not because I'm not capable of saying that in English directly or in any other language that I speak, but they are doing it better. So, translations with artificial intelligence are awesome. Another example, here for the conference where we are now, I talked about that last year.

[41:16] Whisper.com by OpenAI. Whisper is a service by OpenAI.com.

[41:22] Whisper is something that analyzes what, for example, we talk. It summarizes it. It gives you perfect chapter marks, stuff like that. Oh, beautiful. And if you think about it, you have a transcription of what you hear, and then you put it in a translation engine that is mind-blowing. It's not that these things not existed before, but they were crap. Right! And no no one in the united states cared about that because they understand their stuff because it's english but the translation were crappy and today have a look at the at the Youtube channels where people use it it's it's really on another level if you think about photography it changes a lot and one of one of the things that we like regular expressions Regular expressions. Regular expressions is, again, so great in terms of OpenAI because that is the style of technology that OpenAI is very good. So that brings me to the next question. What do you think is OpenAI, companies like OpenAI and all the others, what is not so good? What are they not doing well?

[42:42] I think that from what I've read in all of the headlines about OpenAI, that they could probably be- Any other company. Well, I guess I do want to highlight that.

[42:55] OpenAI has a lot of headlines that, you know, they present privacy concerns.

[43:02] And I know that I do harp on this, but I love that Microsoft, every single time that they talk about AI, they're talking about responsibility and confidentiality. And I know that this sounds like an ad, but like, I trust them. And so I appreciate that something as powerful as an open AI model is not just available at OpenAI, but there's a somewhat trustworthy source elsewhere that really focuses on responsible AI use. I was actually in Steven Bucher's, I hope I said his last name right, session, and they included a whole slide on it. And maybe it could get repetitive, but I actually really like that because I, as an AI consumer, I'm not just a developer, but I want to know that my stuff is safe. And so that is something that I appreciate. So I think that companies can do privacy and control better, and some companies do it better than others. As far as all the rest, I did try to opt out of anthropic training, and I wasn't able to. So that would be nice if they offered that. OpenAI does have privacy.openai.com that you can go and opt out of everything. But I'd still prefer to use Azure's implementation by far.

[44:29] I don't want to advertise anything I'm just we were talking about experience and it's a bit ludicrous not to mention the company names thank you I appreciate that because anyone will ask

us okay what is that service that you're talking about right for those who listen to us in the future, have a look at the transcript everything that you see the summary stuff like that is supported by the technology and I will provide some links that you could check out if you like the one thing or the other.

[44:58] You mentioned a couple of services. I remember something like Claude. Yeah.

[45:04] Could you give us some names? Because there are some names anybody knows.

[45:11] Copilot. Right. That is familiar. Right. But do you have a recommendation? What is not so prominent? No. So I started using OpenAI first, and then I used Claude, I think, because I was writing the book, Generative AI for IT Pros, and I'm still in the process of writing it. So I had to try out other services. And any time that I start using a service, I slam it with as much information as I can because I want to know its limits in that way. And you know you I can I uploaded a ton to OpenAI and it let me down but then I uploaded a ton to Claude now it does have limitations that you can only upload five files and then you can only and each of those files it's about 600 kilobytes but man does it like memorize and deeply understand those 600 kilobytes. So a lot of times I will upload like an entire module and work with Claude. That's my number one favorite for the most part. Also because it is an excellent coder. Whenever you put Claude's code into VS Code and run it, it's going to work.

[46:36] And I like the way that it talks. It's not overly apologetic sometimes. Sometimes it'll get on a roll. And like everybody on Reddit, it's like, oh man, this just keeps apologizing. It's annoying. But what I like is that it's like, yeah, you're right. Let me do this. Or good idea. And even though it's fake, I really like that encouragement. Whereas open AI over time got kind of cold, like here. And I'm like, here, but, you know, softness.

Delving into AI Engines

[47:10] Oh, now, I was trying to answer the rest of your question, but I just don't have the answers because I tried Gemini. It was terrible. I have not tried Copilot because I didn't have a license at Microsoft Copilot 365. And yeah, and when it comes to the open source ones, I just want to say real quick, if you want to work with open source models and see this, and it creates it at REST API endpoint on your own local computer, in VS Code, if you download Microsoft's new extension called AI Toolkit, it is phenomenal, and it makes it incredibly easy to run all of those models that we hear about, like Mistral, and I don't remember the rest. By the way, if you have any kind of questions, something like that, keep that in mind, and we will come to that later.

[48:08] If we, we're all getting older and older, and we think about the next generation, the younger people, and we already have something that people call prompt engineering. Yeah. So, when we think about young people not coding anymore, for example, the new coding is prompt engineering. So, I have something brought with me I want to show you. I always think that, wait a second, isn't it time to invest in human resource also? Also, because if we think about artificial intelligence based on things that already exist, and we still have to invent something new, don't we? So, the question is, what is your point of view?

[49:03] What is, what's going on with the new generation? Will their, what they learn, will it completely change? Will it be harder? Will it be easier? with the help of artificial intelligence? So as I code using Claude or using OpenAI, I recognize my own skill in actually coding. And yes, now I code in English, but the only reason that I know what to say and say all day long in English now is because of that experience.

[49:42] At this point with AI, I would have a really hard time. I haven't seen it, and I don't believe that somebody with no coding experience can just develop something. Yes, I, as a PowerShell developer, did develop an entire, and it starred on my GitHub page, I did develop an entire TypeScript VS Code extension, and I don't know it, but I know programming.

[50:14] I've read that what's going to happen is that the engine's going to know how to better interpret the question and better produce code. I never believe things until I see them. And so in that way, I have no idea what the kids are going to do or what the future is going to be because I haven't seen it just yet. I think it's to us, for those who are getting older and educating people, really take care that we carry on with the meaningful stuff, but that we're already open for something new. You know, our parents talked to us, why don't you do handwriting? Writing and I said I'm I'm typing with 10 fingers that's the new skill that's way more important but still we think it's important to do some handwriting and some people make arts great point yeah so I think uh it's getting harder and harder to keep up for the new generation because we have so many tunes right so um this is the life situation is something very special so we won't extend that here forever.

[51:33] So I thought it would be nice to have something a little bit entertaining and I would really encourage you to watch Chris's talks.

The Future of Prompt Engineering

[51:41] We got great recordings and I hope you will enjoy the details on that. And I would like to come for the final part of the talk, I would like to come back to something that we already saw. Let me show you what I mean.

[51:58] And, of course, if you have anything special, take your time. But, first of all, if I got it right, you're from the United States, right? I am. And you are from Louisiana, is that right? La Louisiana. That is important because there is something special. Ah. You're from the, I don't want to pronounce it in a wrong way, the Cajuns. Very Cajun. Would you like to explain for those who do not know what is so special about your "tribe"? Is it allowed to say it like that? The French speaking Louisiana people? Yeah, so there is a 22 parish region down there at the bottom. And if you see now, I'm going to start talking with a Cajun accent since I'm talking about Cajun stuff. So if you look down at the bottom at Vermilion Parish, that's where I'm from. I grew up 22 miles from the Gulf of Mexico. And, well, it's interesting growing up. It was interesting growing up Cajun because I always thought that Cajun people were from New Orleans. And, you know, we're just some fakers. But it turns out that there's only 1% Cajuns in New Orleans.

[53:17] And it's all Creoles that live in New Orleans. and the Cajuns are way over here on the left. So we're divided kind of into two parts. But what's also cool, I think from a European perspective,

he asked like, why can't I understand you? And I said, well, this is the accent that I have even at home, because like, if you look at like Vernon and Beauregard over there, right? All them on up, that's a whole different state. That's like southern Arkansas. But everything below I-10, you can't see it, but it's the interstate 10, it's all French speakers. And the reason is because in 1755, during the Great Expulsion, we actually were French-Canadian. And then the English came in. Thank you, Ruskin. And they booted us out. And then we went. Some of them dropped off in Boston, which is why some people think I have a Boston accent. And some of them kept going all the way down. And eventually, like we brought our ways of cooking and we were very simple agrarians. We were very against like joining any wars and things like that. And so, but we're also very isolated. So Iberia Parish, you could see to the right of Vermilion Parish, they have a completely different dialect than we do, kind of like how they have different dialects in Belgium even.

[54:42] But yeah, it was a really wonderful place to grow up because we did incorporate a lot of, like, there were just, there were a lot of traditions that we had that to me were just kind of normal and I didn't realize until I left. One of those things is boudin, right? So if any know y'all speak French. You're like, oh, some sausage. But no, our boudin, it's rice and meat mixed together. And I thought that was everywhere. You go to the Circle K and you could get that. And so I went to the Circle K in California and I said, hey, you got some boudin? And he said, what? And I said, you got some boudin? And he was like, what?

Exploring Cajun Heritage

[55:27] And I was like, some boudin. He was like, we have hot dogs. And it was really weird to me. I was like, oh my God, wait. So y'all don't have boudin do you have gumbo, Do you have etouffee? And that's whenever I realized that it was just a very unique place. Yeah, if I had to go back to America and all things being the same as they were back in the day when I grew up, I think that I would either live in New Orleans or Los Angeles. Great place if you've never been.

[55:59] Yeah, that's an interesting heritage, right? All the different areas. Yes, you have French-speaking communities or kind of French. No, no, no. So, you know, the reason that I gasped is because, so our parents, my mom's first language was French. And you say, Chrissy, you know how to speak French? And I say, no, because the Americans were like, hey, French, all of you who speak French, you're poor. It's a shame that you speak in that language. And they literally beat them. So then all of that generation internalized that French is bad. Oh, it's and not only that, they thought they spoke the bad French. And then whenever I left and then I see all these dialects being spoken everywhere. And I was like, that's just French. It's the good French. And so, yeah, but I also did want to let y'all know my last name's La Mer. My parents know how to speak it. It was too shameful to teach us. They all regret it now. and now all the younger kids, they're all learning French.

[57:05] I wanted to emphasize that there are a couple of regions, also in Canada, where Montreal, I think, is the area where people speak kind of French. And on the East Coast, very popular, the Dutch, Pennsylvanians that speak kind of German, which, by the way, is, again, very confusing

because they name it Dutch, but they mean German. Well, that's a different story. I could go on forever about that. That's a freaking story.

Testing French Knowledge

[57:35] But I have a little quiz for you. So now you have to be careful. Yeah.

[57:44] And to finish with our nice talk here, I brought something with me. So now that you're rooted in the French language. Yes. I want to check out how good is your French. Okay. Pas bon. So, and all you have to do is tell me what is the topic. You will hear some French and you will see. And tell me it is soccer. If it's software. Soccer. Soccer. Or it is computer. Let's do it. Or it is hairdress. I think I can do this. What is the topic? I think I can do this. You got it? You got it. So look at that. Yeah. And wait a minute. Got it. "Les monades sont le terme utilisé par Leibniz pour désigner l'unité fondamentale de l'existence qui s'agrège en composé pour réaliser un objectif. Dans cette philosophie, tout est une composition de monade. C'est ce que nous voulons réaliser avec la gestion composable." Man, I don't know, but it was beautiful. So for those who are listening to us, Chrissy also sees the text. So what does that come from? You're very familiar with the original text. Any idea?

[59:04] You can guess. All right. So let me go through this line by line. So I feel like one is Leibovitz (Leibniz). Oh, my God. Oh, fundamentals of PowerShell. Hell yes. All right. Okay. PowerShell is hot. It's good. It's a good idea. Okay. Okay. Philosophy. How is that called in English? What? Philosophy? Yeah. PowerShell and philosophy. What is famous? Monad. Exactly. Who wrote that?

[59:38] Who wrote the... Did someone recognize it? Okay, I guess we can agree that she already understood it, right? So it has to do with PowerShell and with the Monads. And now for all of us, you get the translation, but be aware, if you don't want to go to the United Kingdom, kingdom, this is what you should expect. Wait a second. The Monad Manifesto. Monads are Leibniz's term for the fundamental unit of existence that aggregates into compounds to implement a purpose. In this philosophy, everything is a composition of monads. This captures what we want to achieve with composable management.

[1:00:22] I love it. Thanks to James Ruskin and thanks to Geo (Dubreuil).

[1:00:27] I'm too afraid to spoil up your surname. So thanks to James and Geo. Thank you very much. That was beautiful on both of your parts. I loved it. I got to say, though, this is hard even in English. These are some big words. Pardon me? These are some big words even in English.

Unveiling the Monad Manifesto

[1:00:46] Yeah, exactly. It's Gottfried Wilhelm Leibniz. It's not easy to understand. But this is a little part of the Monad Manifesto from Jeffrey Snover. And that is the root source of PowerShell, as I guess anybody knows who is in the room and maybe anyone who's listening to us. So the very, very final thing that we do now to say thank you. I do something that is a bit awkward because I guess you're familiar with the saying, I'm carrying oars to Athens. I was sad that we are all also

carrying coals to Newcastle. For those who know what I'm talking about, carrying or taking oaths to Athens is a saying where you describe that you do something very, very, very useless, right? Useless. Useless. Got it.

Owls to Athens

[1:01:40] And I thought we're here in Belgium, so I bring some beer. Oh, yes. That is definitely carrying owls Athens, but I have a certain reason for that. Let me show you.

[1:01:54] Because I know...

[1:01:57] One more thing that we have in common. Chrissy and I, we both do love beer. So for those who listen, enjoy, but not too much. So be careful. And I thought, yes, it is a bit ludicrous to bring beer to Belgium. But since the craft beer scene is evolving so greatly. Oh, look at that. I brought something very, very special from my home area, from a garage craft beer brewery. I don't make here any advertisement, but I'm pretty sure you will never get that beer. So I want to say thank you, Chrissy, for taking your time. This is awesome. I would like to say thank you for all the work you do and for all the inspiration that you give us to us. And that's my way of saying thank you. And if you agree, maybe you can give a hand of applause for the work you're doing. Thank you. Thank you so much. Thank you.

[1:03:03] This is awesome. Shall we break it open? Of course. To be careful, there is the master class on IPA. Very high alcoholic for an American guest, of course. And the taller one is a session-level beer. So if you want it, open it and let's have a drink. I've lived in Belgium for a real long time, so I'm going for the 8%. You want a little bit more. Yeah. But Dick cares. Wait a second. I do want to thank you for choosing the photo with the nose strip on.

[1:03:39] So sometimes, you know, being an American in Europe, I can't breathe. And as a matter of fact, before doing this podcast, I made sure that I can't wear these nose strips in public. So I use some Afrin to make sure that I can breathe. But in this case, you know, I thought I'll just upload this stupid picture real quick to Twitter, you know, to show people that I'm drinking some left. Nobody's really going to see this no strip across. So thank you, Thorsten, for, you know. Thanks for having us. Bringing it to the people. Thank you. And thank you. So cheers. Cheers. To absent friends. To Friends and PowerShell. Yeah. Thank you.

[1:04:22] Music.