EPISODE 1326

[INTRODUCTION]

[00:00:00] JM: Application Security is usually done with a set of tools and services known by the acronym SIEM, or SIEM, security information and event management. SIEM tools usually tried to provide visibility into an organization's security system, as well as event log management and security event notifications. The company, Panther, takes traditional SIEM security a step further. Panther processes and retains all of your security data with a cloud-first workflow. It identifies suspicious activity in real time. It enables building a high-fidelity alerting pipeline with Python, including version control, unit tests, and CI/CD, and provides a security data lake where raw logs are structured for security at scale. In this episode, we talk with Jack Naglieri, founder and CEO of Panther Labs.

[INTERVIEW]

[00:00:52] JM: Jack, welcome back.

[00:00:53] JN: Hey, thanks for having me. How are you?

[00:00:56] JM: I'm doing great. How are you? How is the pandemic?

[00:00:59] JN: Oh, it's great. No, I'm just kidding. Things are getting better now, obviously, with the vaccine, and we're gaining the ability to meet in person again. Obviously, we're not meeting in person now. But I think over the next several years, things should become a little bit more normal and sane again. So looking forward to that.

[00:01:18] JM: Yeah, last time we met, you came over to my apartment. I had set up this nice studio in my apartment. I rented an expensive apartment that was totally out of my budget, because I wanted to set up a studio and basically have like a home studio. And then of course, COVID hits. And I have no studio. No reason to own or to even rent studio space. So I was basically paying like an extra, probably, let's say double. I was basically paying double what I needed to pay because I wanted a two bedroom with a studio in it that I could record podcast.

And you were one of the few people who I actually got to do that with. We met. Was it like three months before the pandemic or two months?

[00:01:52] JN: Yeah, it had to have been – It was January, I think. So about three months, right? Or was it December?

[00:01:58] JM: So that was trippy, right? Because like you came over, we hung out. It was great. Like that's the life that I was building. And then COVID derailed everything.

[00:02:07] JN: Yeah. Honestly, building the company through that time has been really interesting. I mean, when I met you –

[00:02:11] JM: Tell me about it.

[00:02:12] JN: Oh my gosh. I mean, I think we met at the Andreessen Horowitz event with HashiCorp, and Ali from Databricks and everyone.

[00:02:21] JM: That was awesome event. I had so much fun in that event.

[00:02:23] JN: Yeah, it was really interesting.

[00:02:25] JM: Nobody puts on a party like Andreessen Horowitz, I'll tell you that.

[00:02:29] JN: Yeah, it was pretty nice. I mean, the food was great. And great location. So yeah, 10 out of 10. And actually, I've been really impressed with what they've done during the pandemic too around like podcasts and stuff if you've kept up like their Clubhouse. And just a16z podcast in general is really great. So really insightful, actually really helpful for me building the company as well during that time. So yeah, I mean, this was an open source event too. And Panther had just open sourced in January around the time that we released the prior podcast. And the team was probably about six people. Like my company was pretty small then. And since then, Panther is about to be 50 people in the next like month. So a lot of things have changed. And we've really built the company through the whole pandemic in a lot of ways. And we went from having no sales and like a handful of customers. Actually, wait. No, 2020. Yeah,

we had no customers until June. So June of 2020 was our first sale. And then if you fast forward to today, we're at like about 25 customers. And if you look on our website, like they are like very marquee customers. It's Canvas is on there. Coinbase is on their. Dropbox is on there. Like these are serious security teams using our product now. And our product has evolved a ton since we chatted.

I think we had just open source actually around that time that we last spoke. And that was a big focus of the company for a long time. And in 2021, we actually ended up going closed source. And obviously, I mean, I have a ton of thoughts around why we ended up doing that. I have a lot of thoughts just around commercial open source in general, when it's good, when it's maybe not as good of an idea to do in a new business. But yeah, a lot of things have changed. I mean, the product has evolved so much. We've really solidified our partnership with Snowflake. And we've really just built something that a lot of teams are getting a ton of value of when it comes to detecting breaches at scale, to just collecting and managing log data and making sure that they have the tools to do detection and response at scale. Like that's really what we've been building towards for a long time. So it's cool to watch it happen.

[00:04:37] JM: What's your partnership is Snowflake?

[00:04:40] JN: The partnership is really around the technology that we use to power Panther's security data platform effectively. So Panther takes security logs that are unstructured. We normalize them, structure them, and we put them into a data lake. And in the past it was either based off of – Actually, initially, it was based off of Athena. So Athena and S3, and that was the architecture, which is decent. It works at a medium scale. But once you start to get into like the realm of multi-terabyte data volumes per day, it starts to have scale problems. And we started experimenting with Snowflake around mid-2020. And then as we invested more and more in it, we became more in touch with the company. And we actually were just named their cybersecurity partner of the year. So we've been working quite a lot with them.

We try to enable Snowflake's customers to really bring in their security datasets. And for us, we use Snowflake as a technology because it scales very, very nicely. The whole separation of storage and compute, and the warehouse sizing and all these things that they do, like they just focus on this. Like this is their company's entire mission is to make this amazing, right? And not

to say that Amazon is not a great technology company. They absolutely are. However, Snowflake is like literally dedicated to this. And you can see that in the technology. And we've really gotten a ton of value out of that in our platform. And it really is a special moment, because security teams historically have always just been really burdened by the amount of data that you need to collect. And Snowflake is really one of these tools in our toolbox that allow us to enable security teams to do their job at scale now. And it's been pretty incredible.

Like we did a load test where we put like, I don't know, like 100 terabytes into Snowflake for this demo. And then I did a live demo. And the queries were just like so fast. And I was like, "We've never had this insecurity before. This is really a special time." And it's allowing us to support these huge customers like Dropbox, for example. They're doing a massive amount of data. And we're running a lot of our customers' infrastructure in our SaaS as well that's powered by snowflake. So it's been a really interesting ride. And we made a conscious decision to just move solely to Snowflake this year, in addition to going close source and have all the other practices that we're making.

[00:07:09] JM: Is the basic premise of your company that you want segment for your security infrastructure?

[00:07:17] JN: It's been described to me as that by investors. And if you think of it that way, it's similar. However, the way I prefer to think about it is more Panther as a security data platform. And there're a lot of things you can do on top of that. But the basis of Panther is taking a ton of data in information that's relevant for security, making it usable, and then applying that for specific use cases. And an example of that is the same use case, right? Security information and event management. We just need to do basic analysis and threat detection on that data. So that's one particular use case. Another use case could be analyzing changes to your cloud infrastructure. Another use case could just be hunting around for just finding certain threats in your environment based off of indicators of compromise, and threat hunting, and things like that.

But the basis of Panther is the platform, and everything goes off of the data platform. And without the data platform and without that problem being solved, everything else becomes pretty much impossible to do at a certain scale. And that's been the issue in security, is that people are trying to use Splunk, and they're trying to use Elastic, and all these other tools to pump

terabytes of data into it. But they're really not built for that scale. And as a result, you get like really slow queries. You got inability to just like really scale from a cost perspective. Like literally teams are like, "I can't send half of my data just because I don't want to pay \$5 million a year. Or I literally can't run the team to support the infrastructure that's needed to run at that scale." And having a data platform that's built on serverless, that's built with tools like Snowflake, it gives teams the ability to actually interact with the data without having to worry about the ops. And that's always been the core thing I've been trying to build in my career for the last like six years really. Like it was the part of the project at Airbnb was around using serverless to do security. And then, when I had joined the team and started working as an engineer, I had more of the inspiration around, "Let's build a data lake. Let's make this really structured data. Let's put it in S3. Let's use things like Athena." And then that evolved into what Panther is today. And Panther was like fourth or fifth generation ahead of that at that point. We're a team of almost 50 people working on this problem every single day. So the architecture has evolved quite a lot. My engineers have completely rewritten everything that I wrote, which I'm super happy that they did it. And I just think that –

[00:09:44] JM: It's that a great feeling?

[00:09:45] JN: It's great. I love it. I mean, I love the fact that like we bring people in to solve a very specific part of the platform and they just take it and run with it and make it amazing. And that's been a really fulfilling thing for me as a founder just to watch, especially as we've hired VPs in certain departments. It's really the same thing at an even greater scale. So it's been really great.

[00:10:08] JM: I should have asked you this like a year and a half ago or whenever it was when we met. Is there any chance I can invest? Like am I allowed to say that on an air? Can I please invest in your company? By the by the way, this is a sponsored episode, right? Like you guys are sponsoring this. But I just want to be transparent that I think this product is awesome. I seriously think what you're doing is going to be a gigantic company. And you have Camcov as an investor. Don't you? Like didn't Camcov introduced us?

[00:10:35] JN: I think so. At the Andreessen event, yeah.

5

[00:10:38] JN: Camcov is such a sly guy. I want to get him on my podcast. Can you convince him? I'll give you advisory shares in And one of my companies if you can convince Camcov to come on the show. I'm serious. So I was talking to Nick Schrock about this. Camcov was basically like the funniest venture capitalists. That's his qualification. He's not the best venture capitalist. He's the funniest one. And you actually don't care about who the best venture capitalist is. You only want to hang out with the funniest one. So it doesn't even matter how good he is.

[00:11:04] JN: He's pretty good, though.

[00:11:04] JM: He's pretty good. Actually, he might be the best. He actually might be the best. Who knows? He could be, right? He could totally be the best. He's one of the candidates for the best venture capitalists, the best up and coming venture capitalists.

[00:11:15] JN: The thing that blew me away about him was his network. When we did our seed round, I've never heard so many people say so many positive things about someone as an investor. They're like, "Yeah. Oh, yeah, yeah. You know Camcov. Yeah, let's, let's absolutely talk. Let's hop on." Like massive respect for him. That was so incredible for me as a founder doing a fundraise, because it was just a marathon. I talked to like 30, I think even more than that, like 30 early stage funds within the span of like three weeks, or probably even shorter than that, to be honest. It was madness. I was taking Ubers like all around San Francisco. I was driving to Sand Hill Road. I was like everywhere. And it was not an easy fundraise, by the way. That was a moment in time when things were so early. We didn't really have any data points. We really didn't have a mature product. Like things were so early. And this is like 2019, right? Like the company's a year old. And, now, things are quite different. We've been able to achieve a lot since then. And like we made it on Enterprise 630, for example. I don't know if you follow that. But Wing does this like list every year. It's like early stage, mid stage, late stage. We're in the early stage.

[00:12:27] JM: Alright. Wait. Wait. Wait. Hold on. Are you telling me you care about these lists? Please don't tell me that.

[00:12:29] JN: I mean, if you look at the companies on the list, like they're -

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6

[00:12:33] JM: Alright, it's a good list. Fine.

[00:12:34] JN: It's a good list.

[00:12:35] JM: I'll admit, I like being on a list of like good software podcasts. I'm like, "Yeah, it feels good. It feels good. I like being on a list."

[00:12:41] JN: recognition. But I mean, they did a massive campaign with NASDAQ as well. We were like up on the NASDAQ Billboard. And that was really exciting. We're on the 101.

[00:12:49] JM: Lightspeed did Ray, right?

[00:12:52] JN: Yes, Lightspeed, Garff.

[00:12:54] JM: Okay. Yeah. It seems like a Lightspeed company. Well, Camcov is friends with the Lightspeed people, right? He knows those people.

[00:13:01] JN: I think he worked at Lightspeed.

[00:13:03] JM: He worked there.

[00:13:03] JN: Yeah, he was there for a little bit, I believe.

[00:13:06] JM: That makes sense. What's the Lightspeed's like investment profile? They're really good, but they seem kind of like they're the sharks at the table. Like I don't mind it. They just seem kind of sharky. I like it. I mean, I used to play poker. And whenever I interact with these Lightspeed people, I'm like, "These guys are just sharks."

[00:13:23] JN: Well, I mean, the thing -

[00:13:25] JM: And you're a Panther. Of course, the Panther would hang out with the sharks.

[00:13:28] JN: Yeah, I mean, I love the -

[00:13:30] JM: You're the land shark.

[00:13:32] JN: I love the symbolism, actually, with the name Panther. And I love the trademark. We actually have the trademark Run Panther. And Panther really does represent what we're trying to build, just like something sleek and fast.

[00:13:44] JM: Panthers are known for their agility and their ability to run. Like Panthers just are running machines.

[00:13:50] JN: That's what we're doing right now. But yeah, to answer your question about Lightspeed, I mean, the thing with working with Garff has been really insightful and interesting is he sits on the board of a lot of similar companies to us in that they're very focused on highly technical products geared primarily to like the developer persona and open core companies, which we're obviously not anymore as much. But he works very closely with Grafana, for example, and Grafana has been crushing it. And there's a number of other companies that he works closely with that sort of have this persona with highly technical people or like who are selling to technical audiences. So it's been great. I mean, Lightspeed was the first firm that I worked with that really had like a really great set of resources and things for me as a founder that I could use. I mean, that sort of is the theme as you go up in the amount of capital that you raise and the caliber and the size of the funds that you get. You just get naturally more resources with that.

[00:14:49] JM: So I am convinced now that you have an entire platform, basically. You have a platform. This is Segment. This is Segment for security. Like at bare minimum, it's probably better, because the information is actually higher density, and it's also – It's like more raw. Segment is like we're going to help you ingest events and take actions against them. Panther feels more like if we're just doing security stuff for you, like you can plug into an API data infrastructure about your security in a way that is at least as good as what you can do with Segment, and it may be more powerful. I think you're a super interesting spot. Can you tell me a little bit more about like the product ideation and your vision for what you're trying to do?

8

[00:15:35] JN: Yeah. I mean, my vision ultimately is for security teams to just focus on security and not all the other surrounding things around operations that they always have to deal with. We're constantly burdened by like slow queries and having to scale things and just things that take away from the good security work that we have to do in preventing breaches and in finding attackers and all these other things, right? So the vision really has always just been remove that pain from security teams. Let them run at a massive scale, and give them a platform that's so customizable that they don't know what to do with almost, right? Like it's so powerful, but so flexible that they can really customize it to fit their needs exactly. And every company is different. And every company needs that level of customization.

For me, it just comes back to the – It comes back to me as an analyst, right? A Yahoo. And I'm just like while we have this in insanely massive production environment, there's absolutely no way we can collect all this data. And that feeling is just really demotivating in a lot of ways, because you're like, "How am I supposed to do my job? I don't have any system to put this data to even do my job, right? And I want to remove that. And that's really what we're doing. So that's success, in my mind, if we can approach these companies and approach these teams to where they're like, "Oh, my God, I can send 20 terabytes, 50 terabytes of data a day into Panther." And we'll get to those scales pretty soon. It's constantly getting more and more. So this is a problem that's going to continue to get worse, and there hasn't really been a product in the market that solved it, because it's such a hard problem. Like this is really a platform that will let secure teams ETL all their data without them having to manage ETL. ETL is a very complicated thing, extract, transform, load. It has to do data schemas, and relational warehouses sometimes, and just massively scalable things. And most people don't have that. For me, it's like we're the experts in that. We've lived these problems. We've built this thing. Let us worry about the ops and all the stuff in the background, and you just do security. You just do detection. You manage your data. We got everything else. That's really what success is for me.

[00:17:50] JM: Okay. First of all, I want to be involved somehow, advisory shares, no advisory shares, pay us marketing dollars, whatever. Let's get in business. The reason I think we're going to be a good pairing is because – So you have 25 customers, right? You said, around there? So we have probably over the last – So over the last six years, we probably have at least 220 different customers. And the same people who buy podcast ads on Software Daily want Panther. Like we've got a shared sales channel here. You should just talk to our new CEO. You

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can talk to her and see if she is okay with some kind of partnership where we can like share – We can do a kind of cross-selling sort of thing, right? Doesn't that work here? Definitely? Potentially. Let's talk. What do you want to talk about? Features?

[00:18:58] JN: I mean, honestly, the thing that's been on my mind, the thing that's most interesting to me is just company building at this point. I think I have sort of reached a scale where I don't really do much in the way of engineering anymore. I hired a VP of engineering. He was the one who actually helped ideate the project. I mean, he did ideate the project at Airbnb, and he brought me in to build it. And he's my VP of eng now. So I don't really focus too much in the low-level engineering stuff anymore. And I have a VP of product now too. And he focuses on talking with customers, learning about what they're doing with the product, learning why they need to do certain things.

And I think, for me, it's more so how do we make this a business that's going to scale and how do we make sure that as many people in the market are using Panther as possible? And that's really my mindset. And taking care of the team, obviously, taking care of everyone in Panther. Making sure they're happy, successful, growing. Making sure that we can continue to grow at the right rate. That's really what I think about these days. It's less so around what exact features are we building?

I mean, I think about those things, but I also think about what's our go to market. I think about how should we manage our hiring in relation to our cash burn. I think about all the things, because I'm a solo founder as well. So I effectively have the whole organization under me. So there're a lot of different things I'm having to think about, like employee engagement even, and telling the founding story, and making sure that the team is motivated and happy and enabled. Like those are the things I care about right now.

So it's been really interesting actually building a company during the pandemic. I mean, we went from, I don't know, like six. No. We went from like 9 to 30. And now we're going from like 30 to like, I don't know, at the end of the year, like 80 or something. And it's pretty unique, right? People who are founders right now are having to do most of this remotely. And then you get in a room with 20 people and you feel 20 people looking at you and you're like, "Oh my gosh, this is

so much scarier than on a Zoom call," because it's just a different feeling. But it's also really exciting.

And one change that we made really recently was we made a really intentional decision to go remote-first. And I think that a problem that I see with other founders is that they don't really take like a definitive stance on it. They're kind of like, "Oh, yeah, we're hybrid. We're hub and spoke," whatever it may be. But we thought about it. And we're like, "We're trying to hire really quickly. And what's the point of even putting a limitation on a city when we very may well go into a lockdown again?" Or you never know what's going to happen.

I think the world has been shocked by the pandemic. Everyone's fully adjusted to working from home. And I think as founders, you should just really embrace it. And I think there're so many benefits to remote work. Like if you have a good remote culture, you write a lot of things down. You're very consistent with communication . You allow people to be flexible with their work-life balance. Like there're so many benefits to it, and your hiring pool is so much more diverse, so much vaster now, because you don't have to worry about it. I mean, the downside is that it's operationally a little bit more complicated to do because you have to register in all the states and you have to deal with like unemployment, insurance in all the states. And like that can be a little painful. But there's PEOs, there's ways to make that less painful if you just want to pay for it. But I don't know. I think there're so many benefits to being a remote company. I mean I could have done this interview from anywhere. Like I could have gotten a plane and went to New York and done it and it wouldn't have made a difference. I can do my job pretty much from anywhere in the US if I want to. But I'm still in San Francisco. I didn't leave San Francisco? Or did you end up –

[00:22:40] JM: Yes, I moved to a different place, because I didn't need to be in a gigantic apartment where I had a studio in anymore. It's really depressing. It was so depressing, man. Like I had this vision for what my business was going to be. How we're going to become like a talk show. And then it's just like talk shows got destroyed, right? Because of the pandemic. So it was really sad. Like it was a very, very hard year for me. Like you basically saw me at a high point right before I went into like a very, very deep depression. Because it was a really, really

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hard experience. But yeah, I'm in an apartment. I'm loving it. Aren't you glad we didn't move away from – Wait. You're still in San Francisco, right?

[00:23:16] JN: I'm in Dogpatch. Yeah.

[00:23:17] JM: I mean, how awesome is this city?

[00:23:19] JN: I love it. I mean, I think people like talk really poorly about San Francisco. But I mean, to be honest, I think it's one of the most beautiful cities in the world. I think we have some of the best food in the world as well. We have absolutely amazing access to like produce. And like we're in California, so everything's so fresh. I don't know. There's so much to do in the Bay Area too. You can go hike. You can go to a beach. You can –

[00:23:45] JM: I went to LA last week. LA is super close. Vegas is close. Where is better? Is there any place that's better? Like maybe Chicago in the summertime, right? Like Chicago in the summertime is great.

[00:23:57] JN: I was in New York though for – I was in Brooklyn for about a week.

[00:23:59] JM: New York is an imagination zone as well. It's wonderful. It has everything in New York.

[00:24:05] JN: Yeah. But I think San Francisco is great. I mean, it's always the place when I come home, I just feel so happy. And I'm glad to be here. And obviously, for doing anything in tech, like you have to – I mean, in my opinion, I think you really need to be here if you want to build something really big and iconic. And like –

[00:24:21] JM: You still think so? I mean, where is Calendly? Calendly is Kansas City, right?

[00:24:25] JN: Yeah, I mean, it can be absolutely done outside of the Bay Area. But I just think there's such a high concentration of people here that have just done so many incredible things. And I don't know, I've had the opportunity to just to meet so many amazing people in the past like couple months. And I think a lot of the reason is just because of the attention that we're

getting now. I have incredible people reaching out to me. And I look at their backgrounds and I'm like, "Wow! They were seed investors." Oh my God!

[00:24:54] JM: My cat knocked over my water bottle, and I've water all over my pants now.

[00:25:00] JN: Something like that happened during a demo once.

[00:25:03] JM: Oh, really?

[00:25:04] JN: One of my lead engineers, Nick, he was stuffing through a customer demo and his cat jumped on his keyboard. It was great.

[00:25:13] JM: I bet he closed that deal, though.

[00:25:15] JN: I think we did. Yeah.

[00:25:18] JN: Yeah. I mean, I think company building in general is always such an impossible task. And I think having access to people who've gone through it before, I mean, that's always been the most value for me as a founder is talking to other founders or people who are a couple stages ahead, or just people who can save you time. That is the most important thing to me, is who can I learn from that's going to save me time and help me not make a mistake that's easily avoidable? Like that's really what you're battling against is time. So just being in Silicon Valley, I think you're naturally surrounded by those people just by proximity. And sure, you could build a successful company in Seattle, or Austin, or Miami, or New York, or Kansas City, or wherever you want to be. But I think it's hard to trade the concentration of people that are here and just the access that we have. Who knows? We'll see what happens is the next like 5, 10 years. Everyone's flocking to Miami, but it seems like Miami is much more like blockchain heavy. I don't think I would want to live in Florida. I don't know.

[00:26:21] JM: I visited Miami. It was great. It was okay. It was great. It was okay. It was okay. It's not great. It's actually a place that you probably don't want to live in. It's too humid, too hot. It's grungy, right? It's grungy in the way that New York is grungy. So it's good kind of. But I don't like grungy, to be honest. I prefer like very clean, nice. Like, obviously, the

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crime stuff in San Francisco is a problem. But the whole reason the crime is here, because it's the best place to live. Like even if you're a criminal, it's the best place to live. Like if you go to San Francisco to be a criminal, basically, or a homeless person, or a successful entrepreneur. For all of these people, weather is important, and San Francisco has the best weather.

[00:27:07] JN: Well, I mean, would say the Bay Area has it that's why they're build like San Francisco. It's okay. I mean, the thing with San Francisco is when it's nice, it's so nice. But when it's foggy and cold, it just like can be a little miserable sometimes. But come like September. Oh my god. Amazing, love it. There's so much to do and see here. And yeah, I think the thing I'm looking forward to is just having those events again like the one that we met at and just the ability to hang out with other people going through the same thing. And I have been fortunate enough to meet like other early stage founders even during the pandemic. So that's been really helpful for me.

[00:27:49] JM: Same here, I formed some super strong bonds with people during the pandemic. And it feels like brothers in arms. Like some people – I've formed a few friendships where people, actually men and women that I met, who they were just going through a super hard time during the pandemic, and we were just like, "Let's bond. Like let's go to war together, because we're at war with this virus and this information problem system."

[00:28:13] JN: Yeah, and things I think are starting to become a little uncertain again. Like we were going to do some international travel, but we've sort of held off on it just because delta variant things, a lot of uncertainty around vaccinate people, transmitting it. And I'm obviously not going to like spread information I'm not an expert on. But I think for us, we're watching the cases rise. And I think it's more of just a responsibility that I feel as a founder to not like make that worse. So I think we just need to set an example. But San Francisco is starting to do like requiring vaccines for people to go into bars and clubs and things, which I think is sorry move.

[00:28:53] JM: Wait. Wait. Wait. Are they doing that, really?

[00:28:56] JN: Mm-hmm. Yeah. Like 1015 Folsom, for example. If you look on their website, it has like –

14

[00:29:02] JM: You have to show a card to enter?

[00:29:04] JN: Actually, in California, you can get a QR code. So there's a website you can sign up on. And you just put in your like name, date of birth, and then it sends you a QR code that people can scan to prove that you're vaccinated.

[00:29:18] JM: Great, cool. Well, I'm never going to that bar. Thanks for that information.

[00:29:24] JN: Yeah, it's not every bar. But let's see what happens.

[00:29:27] JM: Do any club that requires me to do a QR code scan to be a part of that club is a club that I'm not interested in being a part of. Unless, we're flying on a plane.

[00:29:39] JN: Yeah, which I don't think they've done that yet. I don't think flights had done that.

[00:29:42] JM: Not yet. If they do that, I'm going to build a Hyperloop. I'm gonna build a Hyperloop around the world just like to avoid having to swipe this QR code that certifies I'm of a certain healthcare risk. I'm like are you really going to tell me you know what my healthcare risk is and you're going to force me onto a plane with some standardized tests? I always failed my standardized tests, right? I don't like standardized tests. I opt out. My whole strategy in standardized tests is to answer incorrectly so that they can't evaluate me properly.

[00:30:14] JN: You only go against the norm.

[00:30:17] JM: Aren't you the same way?

[00:30:18] JN: Yeah, I think so. But actually, funny enough, my dad is a psychologist. And he writes tests to identify gifted children and also children with like learning disabilities and stuff like that.

[00:30:31] JM: I failed one of those tests. I took one of those tests when I was in elementary school, and I failed it. It was pretty funny. I was like, "Wow, you guys are stupid." It's so funny,

because it was one of those moments where like the testing system sucks. And you're just like, "Oh, okay, this testing system is evaluating me as a non-gifted child." That must mean I'm just extraordinarily gifted.

[00:30:51] JN: Well, I mean, you always hear people going on Twitter being like, "I'm a college dropout, and I found it a multibillion dollar startup. School doesn't matter." It's like, "Okay."

[00:31:00] JM: Yeah, but they're still insecure. They're so insecure they still need to post that.

[00:31:04] JN: Yeah, exactly.

[00:31:06] JM: Anyway, Panther.

[00:31:08] JN: Yeah. Panther.

[00:31:09] JM: How about that snowflake company? That's a great company.

[00:31:11] JN: How about that IPO?

[00:31:13] JM: How about that?

[00:31:14] JN: It's pretty big. I mean, Snowflake as a company, I mean, you're talking about like shark VCs. Oh my gosh! Like Snowflake as an organization, they're just like – They're hungry.

[00:31:24] JM: I think Snowflake just like builds the next cloud, right? They're just a cloud company.

[00:31:28] JN: They're a data cloud company.

[00:31:30] JM: Data Cloud.

[00:31:32] JN: Yeah, and they span all the clouds. And they have a massive -

[00:31:36] JM: And have you looked at the Snowflake architecture at all? Do you know what they do? I could tell you. Do you want to hear it? Do you want me to tell you?

[00:31:44] JN: Tell me.

[00:31:44] JM: Snowflake is like a tiered storage system. It's all storage tiering system, because data warehouse is essentially an abstraction that you want both on disk and inmemory. But you don't want to copy all the data. So it's a really interesting tension. They're a memory hierarchy company. They just move bits between different areas of the memory hierarchy. It's great for security. It's great for security data.

[00:32:09] JN: Wait. Like because it's so – Because security data is such a weird data. It's like a do you want an in-memory or on disk? Like you don't really know, right? It's very weird data.

[00:32:18] JN: I think, for me, it's just more of viability. Like it's kind of what I was saying. Like Splunk, and Elastic, and all these other tools that we've been forced to use as practitioners just don't even make it possible to run the scale that we need to without a huge amount of cost. And Snowflake as a technology, as an innovative technology, enables us as security practitioners to do our job. And it's a piece of the puzzle. It's not the entire puzzle. So Snowflake by itself is a great technology, but Panther with snowflake is really unlocking the use case that we have that we're trying to build. So there's still a lot of work that is done on the ETL side to make Snowflake really that scalable data warehouse. Like ETL is a very hard problem. That's why there're so many companies that do it. Like I think DBT is one. Like Fivetran is one, and they're more generalized. So we're you use the analogy for Segment. And that's how Panther was. I talked about early on, like Segment for security. But I think, in my mind, Segment is really just a router. It doesn't really have anything to do with like the storage of the data. I think that's actually the main thing with Panther is the data coming in, getting normalized and stored. And then it's doing things on top of that data. Sometimes it's in real time as it comes through. But some of the times it's scheduling a data warehouse query and then analyzing that. But the core of Panther is that platform. And that's where I think the difference is between thinking about Segment for security,

and then like contracting out with like just building a security data platform that allows you to do all these custom stuff, and all these custom workflows, and all these custom analysis on top of. So it's a little different. It's kind of a hybrid of a lot of things.

[00:33:57] JM: Are we in a computing Renaissance?

[00:34:00] JN: I think we're in a period where things are getting more and more and more abstract. And that's allowing us to do things that previously were seen as impossible. So yeah, in a way. Because, initially, with Amazon, like with AWS starting it was, "Hey, we don't have to run our servers anymore. That's awesome." You do it for us. And then the last like five years it's been, "Oh, we don't have to run – Like we don't have to run complicated software anymore. You do it for us. And now it's just, "Here's code, run it." I don't even have to think about deploying it. It's just getting more and more and more and more abstracted. And that's allowing us to do these incredibly complex things like pub/sub is a very difficult thing to run in scale. Many teams do it themselves still for some reason. I don't know why. Maybe because they think they need the level of control, and most of the time they don't need it.

So I think the renaissance that's happening is abstraction and relying on SaaS and relying on people who are specializing in these problems to really do it for people. I mean, as a SaaS company myself, we rely on a lot of SAS tools as well for that same reason. There's no reason to build everything anymore. A lot of things have just been done. So why rebuild it? Like do you really need like that level of control all the time? I don't think so. So that's the shift I think we're seeing is just going further up the stack. And that was the reason why we use serverless. We're Airbnb. Serverless was so new. Lamda had come out in like, 2016.

[00:35:40] JM: And you mean serverless in terms of lambda, not the serverless framework?

[00:35:43] JN: Correct. Yes. Just serverless tech, right? Like Kinesis is serverless. S3 is serverless. You don't have to manage the underlying virtual machines anymore.

[00:35:54] JM: By the way, can I ask you about the serverless company? So I don't know if you use it or not. But I found that platform to be so interesting and so compelling, and it feels like

18

they're going to get there. Like it feels like a company that's going to take a really long time to get there, but they're going to figure it out. And it's going to be amazing.

[00:36:11] JN: I haven't really used it, to be honest, I've always known about it. But I haven't used it firsthand. So I don't really have an opinion on it unfortunately. I think, for me, my focus is just more of how do we as a platform continue to always use that serverless mindset? Because we try not manage any servers at all, even for our SaaS offering. I mean, Panther itself is like fully serverless by design. And that allows us to do a lot of really interesting things. We're also single tenant, which really results in a lot of like clever operational things that we have to build, a lot of orchestration to make that happen.

[00:36:52] JM: I have a problem. And my problem is that I have too many ideas. I have like four ideas for cloud providers.

[00:36:59] JN: For cloud providers.

[00:37:00] JM: Yeah.

[00:37:01] JN: Do you want to tell me one of them?

[00:37:03] JM: I'll tell you the best one. Oh, actually, you want to hear this? I'll tell you the weird one, and then I'll tell you the best one. All right, weird, the ultimate queueing company. Basically, you set up a queue for each of the queues that exists. You set up kinesis, Kafka, Google Pub/Sub, whatever. Name your other queue. Kinesis, Kafka, Google Pub/Sub, whatever. Name your other queue. Kinesis, Kafka, Google Pub/Sub, whatever. Let's make a super cute, right? Basically, you copy data among all the queues. And it's like a personal blockchain. It's personal agro blockchain. So you have a function that's reading the top of every buffer, or like the front of every buffer. So it's like always going to be buffering out. And you write the same data to all the buffers. And you basically do consensus across the buffers, and you take the highest throughput. Like always take the highest throughput result of all the buffers. You're always reading from all the buffers, and you're always writing to all the buffers and you're just like basically doing a personal blockchain. Do you think that's good or bad?

[00:38:02] JN: Why?

[00:38:03] JM: Every single queuing operation you could ever want to do, you should do with this unit. Imagine you write. You're writing to this abstraction under the hood. The first thing that happens is it writes to a – What's the MySQL thing? Or MicroSQL? TinySQL? What's the small SQL thing? The embedded SQL? SQLite. SQLite. You first write to SQLite on local storage, and then simultaneously you're sending the rights to all these other cloud provider queueing systems. You're sending it to Redis, right? You're sending it to every single thing. And then you're constantly reading the fastest write. So you're always reading the fastest and writing the fastest. And you're a queue. It's the best queue in the world. It's basically the queue that's – it's like the blockchain queue. It's an epic idea. It's still super weird, though. That's not the good idea. That's so epic idea. Knative as a service.

[00:38:55] JN: Everything as a service. It's like what I was saying about abstraction. Actually, the reason you said that is because probably running Knative on your own is hard.

[00:39:03] JM: No kidding. Do you know what Knative is? Do you know what that problem that product solves? Or that open source project solves?

[00:39:11] JN: Knative was like a Kubernetes serverless, right?

[00:39:16] JM: Sort of. It's more like Heroku's – Do you know how Heroku works? How does Heroku like manages servers? Like the cold start problem, right? Knative does that. Knative is open source solution to the cold start problem. To the extent that one can build a solution to the cold start problem, right?

[00:39:37] JN: Yeah. I mean, we see that in Lambda, but I think it's a matter of time before they just solve it.

[00:39:43] JM: You can't solve it, dude. You can't solve it. It's not solvable. It's not a solvable problem. It's a network problem. Like network is unsolvable. Network always takes time. It's always slow. This is a heavy networking problem.

[00:39:57] JN: But the cold start is on just the initial load. So if you can find some way to preemptively do that –

[00:40:04] JM: No. That's incorrect. Cold start problem happens whenever you need to spin up new instances.

[00:40:09] JN: Well, with Lambda, there's a cold start, and then the containers up. In that cold start is a loading library, it's doing all those initial like source code loading. And if you can create that and you can do that on a cycle, you're wasting money. But that's the tradeoff between a container and serverless, is that, with serverless, when you get that first request, it spins up, and then it's like, "Okay, what is this?" And then the subsequent requests, it's warm, so it's gone. So a way around that is you just run a container that's always on, but you're paying for that compute when it's idle. That's the tradeoff. So I think it could even just be more of like figuring out when serverless is better than containers. But I'm starting to see that gap close. Like even with Lambda, they're making the runtime even longer. They're making them even faster, and like it's going to collide at some point and people are going to be like, "Why am I running containers? I can just run serverless. It's so much easier. I can just run Lambda.

[00:41:06] JM: Do you want to expand into the infrastructure as a service business with Panther?

[00:41:11] JN: Do I? No. Infrastructure as a service?

[00:41:13] JM: Why not? Why not? It's a great business.

[00:41:16] JN: Yeah, sure. It's a great business, but it doesn't have to do with my mission, right? I think the why – Do you follow Simon Sinek? Have you read *Start With Why*?

[00:41:25] JM: Yeah, he has the same glasses as you.

[00:41:27] JN: Oh, really? That? Maybe that's why I like him so much. No, I'm just kidding. I think it's a great book. And it reminds me a lot of why Panther is a security company, because Panther could be an ops company too. And there're very similar problems in ops where they

have a ton of data, they have to manage it, they have to put somewhere, they have to search it, analyze it. And there're other companies. I mean, you even said Segment, right? Like that's more of like an analytics company, right. But I think for me, you need to have a clear mission. Like why are you doing what you're doing? I think, for me, it's I want to help security teams. That's been the mission, and the product is a reflection of that. If you muddy, I think, the offering a little bit, it starts to lose. Yeah, his glasses are a little bit more round than mine. But it goes back to the idea of like –

[00:42:14] JM: Does this get recorded? Do screen shares like this get recorded? I think it does, right?

[00:42:18] JN: Zoom. Yeah, definitely.

[00:42:20] JM: That's awesome. If you're watching this right now, I'm showing a picture of Simon Sinek and his glasses that are basically the same as Jack – What's your last name? Naglieri, right? Naglieri. That's a great last name. I've seem to attract people who have interesting last names, because most of my friends have interesting last names. I've very few friends that are named like Smith, or like Robertson, or whatever. It's always something exotic, like Naglieri.

[00:42:47] JN: Yeah, thank you. Do you follow his Twitter?

[00:42:50] JM: I don't. What's on it? What does he talk about?

[00:42:52] JN: He's just like everything he says. It's just like very curated and inspirational. Not corny. You know what I mean? Actually, you should follow Rick Rubin as well. Rick Rubin –

[00:43:04] JM: Do you mean the producer?

[00:43:05] JN: Yeah.

[00:43:05] JM: Yeah, he's like an epic producer. I love Rick Rubin.

[00:43:08] JN: I mean, he's like probably the most -

[00:43:10] JM: Oh, let's talk about music. Let's talk about music for a few minutes.

[00:43:12] JN: Let's do it.

[00:43:13] JM: Give me your background. When are we going to write an album together? Dude, I just went to LA. I seriously went to LA to record a song. I worked at an LA recording studio with a producer and a female vocalist. It was freaking amazing.

[00:43:25] JN: What were you doing?

[00:43:26] JM: Record a new track. Chart topper? It's going to be chart topper. I hope. Maybe it won't. It's going to have a good music video.

[00:43:33] JN: Which labels it come out on?

[00:43:35] JM: I don't know, Spotify. Like labels or a dead idea, man. Who does labels?

[00:43:40] JN: It's like venture capital.

[00:43:43] JM: I guess it probably be like The Prion is the label. Like I'm going to be the first artists label, like my artist is my label. So like you get signed to The Prion. I'm a producer plus a marketing arm, plus an artist, plus a platform.

[00:43:58] JN: It's kind of like Owsla. Do you know who Skrillex is, obviously, right? He started a label called Owsla. And, yeah, initially, it was for releasing his own stuff. And oftentimes what you see is with producers starting their own label, it's often in conjunction with like a bigger label.

[00:44:14] JM: What does Owsla mean? Do you know what that acronym means?

[00:44:17] JN: I don't know what that acronym means, to be honest.

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[00:44:20] JM: I got to look up Simon Sinek first, then I'll look up Owsla.

[00:44:23] JN: Those are very different Google searches.

[00:44:25] JM: Are they?

[00:44:27] JN: Yeah, I think so. But

[00:44:29] JM: This guy like got his arm – He's doing this thing. He's like making an inspirational pose in his Wikipedia picture. British-American author and inspirational speaker. He's the author of five books, including *The Infinite Game. The Infinite Game* was an idea before he created that book.

[00:44:46] JN: I never read that actually. What's the idea? Do you know the idea?

[00:44:47] JM: So *The Infinite Game* is about this – He wrote a book about James Carse's book, which is kind of interesting. James Carse is this guy who had at least one really good idea, which is the idea of finite and infinite games.

[00:44:59] JN: I want to read this. I've been reading Trillion Dollar Coach. I got it as a gift from one of my investors.

[00:45:04] JM: It's a pretty good book. It's a good book. I'm going to download that again. I'm going to download that again.

[00:45:07] JN: It's amazing. It's amazing. I mean, if you've read any of Ben Horiwitz's books, he always mentions Bill Campbell. They talk lightly about him. But then the book, *Trillion Dollar Coach*, is fully about him. And it's just full of so many amazing and inspirational quotes and stories and really feel the impact that he had in Silicon Valley. And I think the thing that surprised me the most is his level of like compassion. And that's really where a lot of his success is attributed to, like just caring about people, and being a good manager, and not just focusing on someone's work persona, but like their whole persona, who they are in and outside

of work. And that was really surprising to me. Because I guess when you think of a great manager, you don't typically think of someone who's like compassionate and cares about what they do in their personal life, or where their kids go to school, or any of the struggles that they have. But ultimately, that's the stuff that gets people more motivated to work and care about the stuff that they do while they show up for work. So it's a really good book.

[00:46:12] JM: Trillion Dollar Coach. Boom! Got it.

[00:46:14] JN: Oh yeah.

[00:46:14] JM: I had bought it before, but I returned it. So I'm going to buy it again.

[00:46:19] JN: Yeah, I have the physical copy. It's really similar to how Google works. I think it's the same writers. There's one. Jonathan Rosenberg I think, didn't he right –

[00:46:28] JM: Oh, it is. You're right, actually.

[00:46:31] JN: Because they make a lot of the same references. And then if you read the hard thing about hard things, there's also a lot of Bill Campbell references, and Marc Andreessen and Ben Horowitz always talked about him.

[00:46:41] JM: You know, I did a show with Ben Horowitz about his new book. Dude, you got to listen to that when. I spent two weeks preparing for it. Like it's the most I've ever prepared for an episode. It was so good. It's so pure. I should go back and listen to it.

[00:46:53] JN: Did you spend two minutes preparing for this one? I'm just kidding.

[00:46:56] JM: No. I'm in fact, I went pretty deep on the product the other day. Maybe that's not why I'm not even talking about it, because I just want to become an investor and advisor or something. Your company's so good, man.

[00:47:05] JN: Thanks, man. I appreciate it.

[00:47:06] JM: I'm not kidding. Your company is such a good idea. Who is doing security better than you? Who's doing security better than Jack Naglieri today?

[00:47:14] JN: Well, the thing that's interesting going back to Simon Sinek, like I think we're a very unique company and that we were built just for figuring out the security data problem. And that's very different than why Splunk was built. That's very different from why Elastic in Datadog were build. And that I think carries a lot of weight and makes people care more. And us as a company, we're solely focused on that idea. And I think that we can attribute a lot of our success to that as well. So people don't buy what you do. They buy why you do it. That's the whole quote of like *Start With Why*.

[00:47:45] JM: Alright, man, we both got to go. This was awesome. Talk to you soon, man. Congrats on all the success.

[00:47:49] JN: Appreciate it. Alright.

[END]