EPISODE 1404

[INTRODUCTION]

[00:00:00] KP: Pinterest is a visual discovery engine people use to find ideas in home, food, style, beauty and more. The service grew quickly after its founding in 2010 and the company has grown to be a global team of thousands of professionals spanning time zones and continents. To deliver the smooth experience Pinterest users have come to expect, requires an engineering team to keep the system running while continuously improving it.

In this episode, I speak with three engineering leaders about their decision to work at Pinterest, the contributions they've made, and what makes Pinterest engineering different from other companies.

[INTERVIEW]

[00:00:37] KP: Kaanon, welcome to Software Engineering Daily.

[00:00:40] KM: Hey, how are you?

[00:00:41] KP: Doing very well, how about yourself?

[00:00:42] KM: Pretty good.

[00:00:45] KP: Well, tell me a little bit about your role at Pinterest.

[00:00:48] KM: So, my name is Kaanon McFarlane, and I'm an engineering manager here at Pinterest. I lead a couple product engineering teams who build the apps and website that pinners around the world love as they interact with the content we have.

[00:01:06] KP: How long have you been with Pinterest?

[00:01:07] KM: I've been here for five and a half years. I started actually on our kind of monetization side, spending time building up the way that Pinterest makes money and making it useful for advertisers. And about a year and a half ago, I moved over to the other side of Pinterest, where now my role is about making Pinterest a really useful, inspiring app for pinners around the world.

[00:01:35] KP: By a lot of Silicon Valley standards, you've had a very long tenure at Pinterest. What keeps you there?

[00:01:39] KM: Well, honestly, I think it's really nice to work for an app that I am one of the customers, right? I've worked at other companies, and I was either just like explicitly absolutely not a customer, or kind of a customer sort of like pretending I was. One of the things I really like about Pinterest is that when I work with my teams to kind of build products for our customers, or for our client, the people who were using the app, I'm building for me, right? There's been at least a few times where it was my idea. I was like, "Man, I really wish this could happen on Pinterest." And then I remember that I worked for Pinterest, and then we go make it.

So, one of the things that I really like is that I get to work on an app that I get to use. The other thing that I found is that the app is really useful. I've used it too – I am actually from the Los Angeles area and I moved to the San Francisco Bay Area to come work at Pinterest. And so, when I got here, I needed to furnish my new home. Pictures became very useful for saying like, "Well, what do we want a couch to look like? Do we want a bookcase? What kind of bookcase?" Even in the room I'm sitting in now I looked for art to kind of work with my new background as I'm on video calls. And so, I really find the usefulness in not just things like home decor, but even like kind of silly things.

I mentioned that I moved here for the job and when I moved here, I was actually living in San Francisco about a mile or so from the office. I didn't want to keep walking to the office. I said, "You know what, I think there's a better way. I think I can scoot." I hopped on a search engine and I started looking for scooters. And then there was a little kind of razor scooters for kids. And I was like, "Well, I don't want that." And then I looked for adult scooters and I found scooters I liked and after I found a scooter, I like I said, "What do I do now?" I guess I like put it in a

spreadsheet or like write it down somewhere which scooter I want. So, then I decided instead to actually just search on Pinterest for adult scooters and save it to a board.

I started an adult scooter board for like scooting to work. I was saving all sorts of scooters, this scooter, that scooter. About a week or two afterwards, I was like, "Okay, I've got 15 scooters here. Which one do I want?" And I made my decision, purchase a scooter and that's how I got to work. And realizing that such a niche completely, like almost silly use case is something that Pinterest would still solve was something that was really exciting to me. And it's one of the reasons I stay here is because we're so useful in the kind of common things like home decoration or food, but even niche things like choosing a scooter to get to work with.

[00:04:33] KP: Well, earlier you touched on some of the projects you've worked on. Could we do a deep dive on maybe one of the most exciting or one of the favorite projects you've been a part of?

[00:04:41] KM: One of the things I've really been excited about is – so I've been at Pinterest for a while now, and one of the things that we've realized is that we can bring inspiring video to pinners not just with static images. So, we've spent a lot of time working on a new format that we call idea pins. So, it's a video where the creator gets to highlight something that they've made, maybe it's a recipe, maybe it's a home decoration, maybe it's something like that. And we've spent a lot of time actually making sure that the UI is easy for people to use. So, I have my Android and iOS engineers doing a lot of work in that area. Also, to make sure that like people can find it. So, I've worked closely with some back-end teams, so that we can make a dedicated space for these idea pins for pinners to return to. That's been something that's been pretty fun as we build out this new content format and we show the cool ideas that creators are putting directly onto Pinterest, to all of our pinners around the world.

[00:05:49] KP: Can you talk a little bit about how Pinterest engineering differs from other companies?

[00:05:54] KM: Well, I would say one of the things that I think is really different is our scale. So, I've worked with companies where maybe we have 100,000 employees, 100,000 clients, or customers, or maybe we have 2 million. Well, at Pinterest, we have 400 plus million monthly

active pinners and we're not just in the United States, we're all around the world. And so, it's actually interesting, because what it means is that you have to really pay attention to how you build the product, to make sure that it scales from a technical perspective, but that it also scales from a product perspective, as people use it all around the world and it needs to adapt to different languages, and different time zones, and all of that good stuff.

[00:06:38] KP: What makes Pinterest engineering different from other companies?

[00:06:42] KM: So, what makes us different is the scale that we have. I've worked at companies where we might have 10,000, 100,000 customers, or perhaps we have just 2 million. At Pinterest, we're one of those companies that actually, we have 400 plus million monthly active pinners, from all around the world. And because of that, we actually need to do things differently, we need to make sure that our technology platforms scale, to be able to handle that sort of load. Our product needs to scale to make sure that it actually works in all the different languages that our users use.

One of the other ways that it needs to scale is our product relevance. So, one of the cool things about Pinterest, is that it's very personalized to each user and it's very highly relevant. And what it means is things like breakfast, that means something and, you know, in Europe than it does in the United States where the company is kind of based out of. So, our relevance actually needs to scale to that global scale as well. And so, we work really hard on making sure that it's it's very personalized. That also extends into our ads. Our ads are a little bit different than some of the ads you might see on competitors. Because one of the jokes is like the ad, you kind of want to actually see if you're searching for a couch or something, you want to see the kind of organic pins, we call them of the couches, but an ad you're not going to really upset you because it's still relevant to what you're looking for. So, I would say, those are some of the ways, the scale and the relevance that we get because of that scale is a really cool that we get to use at this company.

[00:08:31] KP: Do you have any insights for how you can keep that experience, so fluid across different devices?

[00:08:38] KM: Really, a lot of it has to do with a strong design foundation that we our engineering teams work very closely with our product designers to make sure that we're implementing like a consistent design language throughout our apps, throughout our websites, to make sure that it works properly, and that they build tools so that something like a button, looks like a Pinterest button, no matter where it is.

[00:09:05] KP: Makes sense. I'm curious how is Pinterest grown in the time you've been there?

[00:09:11] KM: Well, one of the ways that it's grown has just been in terms of size and the scale of our engineering team. So, when I started, our engineering team was in two offices down the street from one another in San Francisco. We now have engineering offices in Palo Alto, still in the Bay Area. We have engineering offices in Seattle. I've traveled to our Dublin, our international office in Dublin. I haven't been to the one in Toronto, but I know it's there and we're actually starting to scale out an office in Mexico City. So, one of the biggest ways that we've grown the number of engineers across the world.

[00:09:55] KP: And how is remote culture fit in if at all to Pinterest working arrangements?

[00:09:59] KM: Well, what it does is it makes – it means that we need to be inclusive of people who are in a different time zone, right? They just live in a different time and so we need to make sure that we're being smart about when we're scheduling any meetings when we're having conversations, making sure that we're living in the right people. It also means that we need to take care of our employees, what are the things that have been happy about with the company has been the amount of attention we've paid towards the kind of pandemic and the remote work that we're going through, whether it's days off, or sending out articles about how to deal with different things. I think that we've been very thoughtful with our decisions.

[00:10:38] KP: Are there any recent announcements or upcoming features you're particularly excited about?

[00:10:44] KM: I'm really excited about us continuing with the showcase of content from different creators, sometimes who are experts or experts you might not know about yet. We're exploring different things with it when it comes to like live video, and people kind of showcasing

things like that. I actually too did, there was a person who was talking about like menswear for the winter. So, I got a few tips there. I'm also actually really excited about making our interface cleaner and simpler. Over the years, as we've explored all these different ways to bring inspiring content to pinners, I think that we could do a better job of making it even more usable and easy to use.

[00:11:25] KP: So, that's a neat vision. Could you comment a little bit on how a big team especially distributed one collaborates towards that singular goal?

[00:11:35] KM: I think a lot of it has to do with communication across functionality. One of the old pitches values that we used to talk about was knitting, where knitting, as in, sewing, the knitting. And the way that it works for us is that we are an engineering organization, we're a company, and part of that is engineering, part of that is product design, part of that is product management. And we need to work together in our engineering team, what that means is that my team really handle a lot of the front end of the website and of the apps that we need to have close collaboration with our back-end teams to make sure that we're going in the right direction. My team is working on particular company initiatives. But we need to make sure that the other teams in the create pod or the growth pod or the ads organization, we're all moving in the same direction.

So, it means that we're sharing a lot of documents about what our plans are. It means that we include each other in when we launch new features, so that we make sure that we're actually moving in the same direction and keeping the product as consistent as possible for our pinners.

[00:12:44] KP: We could delve maybe more into, I guess, I'm leading to you on direction, if there's any other areas you wanted to cover.

[00:12:51] KM: Yeah, yeah. Let's see. One of the things that I find really cool about Pinterest that I really like, is that we built a kind of system that allows for really, really wonderful computer vision. And what it means is that if you have a pin, an image of, let's call it a coffee table. There's an image of a coffee table, Pinterest has enough – we have so many pins, we have billions of pins, that we can recognize that this is a coffee table. One of the ways that it's really useful in our product is that maybe you like that coffee table, but it's not exactly what you're looking for.

So, you can use the visual search features that we have, in order to find coffee tables that look kind of like the coffee table that you started with.

You actually are able to kind of almost pivot or just kind of find your own journey of inspiration. But that doesn't come easy. What we've needed to do is train huge, huge data sets with machine learning. So, that we start to recognize that, well, this is a coffee table and this is an omelet. And this is a French braid hairstyle and all of those different things. So, the kind of machine learning infrastructure that we have is actually a really exciting opportunity and our team over there continues to grow. And then on my side more on the product side, we start to think about, "Well, how can we use all this wonderful knowledge that we have about the pins that people are putting on Pinterest, and make sure that we can build products for pinners to use to make it more exciting in their lives?"

[00:14:31] KP: So, do you see visual search is more of a discovery element or are there other use cases?

[00:14:37] KM: It's actually something that helps power our relevance. I talked before about how Pinterest is deeply relevant for each pinner. As you use the product and we see the things that you like, we start to kind of understand your taste. And what that means is that instead of using say simply the text signal of a pin, the pin is called coffeetable.jpg, or it's on a website, perhaps that has coffee table in the title, we're actually able to use the understanding that we get from our computer vision to actually say, "Okay, well, now let's recommend other coffee tables like that." So, it doesn't have to be something that a user is doing explicitly. But it's something that we can do as we come up with the recommendations that have coffee tables that we might show to a user. And what the beauty is, because of our scale, I'm using coffee tables as an example. But it's just about any type of image you might have.

In fact, we even have something in our search functionality, where you click into the search bar, and you choose a little camera icon, and then a little camera icon, lets you take a picture of whatever's in front of you, and it'll start to look for things just like it. So, it's not even pre trained data, we can actually do it in real time. So, it's one of the most powerful things that we have that really, whether it's used explicitly like that, or it's kind of used implicitly as we come up with recommendations. It's something that's really powerful.

[00:16:02] KP: Well, as a Pinterest user, have there been any major releases you've been involved in that have really impacted your own enjoyment of the platform?

[00:16:10] KM: Yeah, I would say one of the recent ones that – I mean, I did work on it, but I'm not biased. I really like it, is we released a new Watch tab. This new Watch tab, actually, it's like our home feed. But instead of seeing multiple pins, you see kind of one short video and idea pin at a time that's relevant for you. And it's been really fun to see what Pinterest has for me that day, as I see kind of different ideas that I didn't know about it. So, one of the things that's been really kind of fun for me is like watching people execute food recipes. This isn't something that I knew. I didn't know I like this. But Pinterest is kind of showing me that I find a lot of enjoyment in it. It's been something that I think I'm really happy we've added to the product, because it allows us to be highly useful when I'm looking for something in particular. But sometimes I just want to kind of lead back and be entertained by the cool stuff that we have, and that's what we get with the Watch tab. So, I'm really excited about it.

[00:17:08] KP: Kaanon, thanks so much for coming on Software Engineering Daily.

[00:17:11] KM: Alright, thanks so much. Have a good day.

[00:17:13] KP: Whitney, welcome to Software Engineering Daily.

[00:17:16] W: Hi, I'm very excited to be here today.

[00:17:20] KP: Can you tell me some things about your role at Pinterest?

[00:17:23] W: Absolutely. So, I am an engineering manager at Pinterest. I am quite new to the team. I've just started in the Pinterest Toronto studio at the beginning of September. So yes, so still learning everything and getting everything set up here.

[00:17:41] KP: So, what attracted you to come work at Pinterest?

[00:17:44] W: Yeah, so for me, Pinterest has been a company that is very, very interesting in the sense that in the technical realm, they deal with a lot of data. They have a lot of users. And they use this data in a very interesting format, at least in my perspective of driving trends, of doing social in a slightly different way than everyone else. And at the same time, they are a company that I think has global impact, that the stuff that they do, and the stuff that they work with is not just focused in one place, because of the imagery and everything that kind of goes across the world and across different zones. Anyone can kind of come in and sort of use Pinterest to create a space that they feel safe browsing in.

[00:18:42] KP: Absolutely. Well, I've talked to a few of your colleagues and heard some interesting ways in which they personally have used Pinterest. Do you have a similar story? Is there a way you've leveraged the product in your own life?

[00:18:55] W: Yeah, so for me, I am somebody that has lots of different hobbies, lots of different things outside of tech, things that have very little relation to each other sometimes even. And so, Pinterest is a great place to just be able to dive in and kind of touch on a little bit of everything. It's just one place that I have to go to that I can look up Japanese fashion, but also look at you know, car mechanics and like just gather all these different things together, build my own little space that I feel like belongs to me.

[00:19:33] KP: Very cool. What are some of the exciting projects at your location?

[00:19:38] W: So, at Pinterest, Toronto, we are focusing on the shopping and E commerce component of Pinterest that's going to be up and coming and a big driver of Pinterest. So, this is something that we've heard a lot of our pinners have been asking for over the years and we finally want to build out a seamless and great experience for pinners, to be able to see things that they like, and then immediately lead them to a way to purchase those items without having to search for it or go externally. So, we want to really work with our pinners all the way up to our merchants, big and small, anyone who wants to sell what they're working on, and just have that connection between the two, so that it'll be beneficial for everyone.

[00:20:28] KP: Is there a vision for what that user experience will be like?

[00:20:33] W: Yeah, so I would say, the vision right now is to really create an end to end seamless shopping channel that can guide users in the space that they've already created with all the things that they like, and to be able to easily bring those things into their lives in real life, basically. So, what we're looking at is being able to look at products, being able to look at high quality products that are directed, based on what you enjoy, what you think is trending, and then being able to take those suggestions, and to give you either more suggestions for browsing. Or if exactly what you want to direct you to the right place with a lot of different choice that you can make, that's based on what we know about you and what we think you like. And then ultimately be able to just make those purchases in one space and just kind of see everything laid out in front of you, and just to make it easy for people to get what they want.

[00:21:43] KP: I like the vision and it makes perfect sense to me that Pinterest with all the data you have on users could do a really good job of providing this. But it's not a single person effort, it's going to take a team wearing lots of different hats to get this done. Could you talk a little bit about the collaborative efforts and the types of roles that are involved in delivery?

[00:22:05] W: Absolutely, yes, building a shopping platform like this with all of the data that we have, absolutely will require a collaborative effort between all the different teams here. So, in the Pinterest Toronto studio, specifically, not only do we have the teams that are building out, like the visual front-end components on web of how the user interface for this might look like. We've also got machine learning teams that are working in the background, to drive and gather all of the data, and to build a bunch of really cool signals and trends that feed into a lot of our technical systems that allow us to know what to show to the user. Because if you think about when you google an item, like all of the billions of possibilities of things that can come up. So, how do we take all of that data? How do we aggregate it? How do we sort it? How do we present all of that data so that you're seeing the right thing that will allow people to feel like, "Hey, this is what I want to do this something I want to action on?"

So, a lot of technology behind the scenes goes towards all of that, and then just building from the ground up of you know, all this data, getting through it, and then feeding it into all of the designs and all of like the the beautiful user interfaces that you see on web and on mobile, and then ultimately to the end user so that they feel like, "Oh, like this is almost like magic coming in and seeing the things that they want to be able to buy it."

[00:23:41] KP: What makes Pinterest engineering different from other companies?

[00:23:46] W: Yeah, so in my opinion, I would say Pinterest engineering is really cool, because we use our sort of technology, our data, and our knowledge on the engineering side, to build products that are more so driving the future of trends in a way. How I would describe this is, we are using our engineering skills and our technology to solve problems that at a global scale, are looking at things like how do we build more inclusive and diverse products? How do we take all of this information and all of this data and stuff that we have, and use it in a way and build things in tech in a way where we are driving sort of the future of how society might want to interact with each other, how society feels safe online even, and how we can create using technology, the ability for people to feel like they're inspired in their day to day life by what they're using when they come to Pinterest.

[00:25:05] KP: So, I like that vision a lot. Could you elaborate on how you make a product more optimized for inclusivity?

[00:25:12] W: Yeah, absolutely. So, I think the important thing about, when we're looking at product inclusivity, is to make sure that both inside and out, we're incorporating all the right people. So, what I love about Pinterest as a company is that inclusivity, internally, even in the company is a very big, important thing that we talk about all the time. We want to build inclusive and diverse teams within Pinterest, because the type of people that are working on the product will also help to define how the product will look and be like, and having that type of diverse insight will definitely help us. And as well, we want to make sure we're talking to all of the people that are using our products. So, when we do our product research, and when we think about what are the things that are most important to us, we look at the people that are using it and we go through like a variety of sort of different ways to find different people that we can bring in to get their input, to get their insight. And we take all of that and we build it into our products, and we make sure that all of our technologies and things that we're using is driving inclusivity in that way.

[00:26:36] KP: Well, you've got a huge audience of existing users to poll or to measure, things like that. Can you speak to the ways in which that becomes an informative source having being

such a leader in the space, you've got a lot of data to look at even outside of the like, I guess, kind of closed room testing you describe where you might have someone come in? Yeah, I guess more broadly, just are their data driven ways you can include as well?

[00:27:01] W: Yeah, very much so. Like you said, the great thing about having so much data at your disposal, is being able to sort through all of those things and seeing, what are the up and coming things that are important to people, and really doing a deep dive into how we can take that data and either bake it into our product, so that it becomes a thing that is even more widely used. Like examples of things that we've released, that I want to say, are guiding the product towards a more inclusive and diverse nature for we have a lot of beauty products and, and people looking at those things. So, being able to provide panels that give you a variety of skin tones to choose from, because everybody's different, everybody's skin tones are different, and kind of having the ability to do that will I think give more insight to even the users of our products to be like, "Oh, hey, there's not only one way to use this product, or one way to see this product, there is a multitude of ways to look at things in the sense."

And having that out there, and even for our shopping platform, specifically, when we're building out our shops, we're thinking about what would our users want to see? And what would our shops need to be able to represent their themselves correctly? So, allowing them to add to their branding, the type of merchant that they might be, right? Whether they're a black owned business, whether they're a female owned business, whether there are certain charities or things that they support, all of those things. We want them to be able to tell their story authentically in Pinterest, and hopefully, being able to see this and be able to launch this globally around the world will allow people outside to sort of normalize, "Hey, these are things that we can use in this product, and these are things that we should start using maybe even outside of Pinterest as well."

[00:29:06] KP: Yeah, it would be surprising to me if a company said we are not striving for diversity, everyone knows this is a value we want. But it's easy to say it, it's harder to do it. Do you have any advice for other engineering groups on how to execute on that?

[00:29:20] W: Yeah, absolutely. So, I think it is definitely a difficult space, especially when you cut it – you have to kind of look at the history of sort of engineering and technology and kind of

how everything came up. Because myself, as an individual, being a female growing up in this space, it definitely has been interesting to see how diversity has expanded out of this space. It's no joke. I think everybody in the tech space, has known and seen, like, all of sort of in the past, there has always been this stereotype of who works in technology and what is technology? And who should be involved in it? Myself included. I've definitely had family members that are like, "Oh, engineering? Technology? That's a really male dominated space. Are you sure you want to be in here?"

So, this is now a time, I think, where we're growing out of that. And I think the more we talk about that with your teams, the more you talk about that with your company, that's how you're going to start breaking some of these barriers, and start being able to build engineering teams, and think about engineering products in a way that is different than what you have thought about before. And this is sort of the starting point of how you start incorporating diversity into this space and being able to talk to other people that you may normally might not have thought to talk about before, because you never know where you can find inspiration from. You never know what type of different opinions might work for you. And just the more different set of eyes and ears and things that you can incorporate into your product and your skill set, I think that's the best way to kind of break some of these barriers and start building a more diverse community. I think it also allows us to even grow in the ways we think about technology and how we're building tech and how we're using software to build things as well.

[00:31:31] KP: Well, I'd love to ask a similar question from your experience as a manager of other software engineers. I mean, sometimes you have a very vocal, direct report, and sometimes one that's a little hesitant to share. How can you really make sure you get a good balance of ideas from everyone on the team?

[00:31:47] W: Yeah, absolutely. So, as a manager, when people ask like, "Oh, what's your management style? What works?" I always find it difficult to answer that question. Because I feel like I don't have a specific style, because what I like to do is, I think I cater my style to the individual. People, we're all unique, we're all different, especially when you're trying to build diverse teams, you're going to bring in even more people that might be completely different in terms of their working styles, their strengths and weaknesses from each other. And so, you can't really apply the same concepts to everyone, right? Kind of like how people come to Pinterest,

and they build their own safe board of things that they like, not everybody likes the same things, right?

Similar to managing engineers, not everyone's going to work the same way. Like you said, some people are going to be more vocal, and some people are going to be less. So, depending on what their comfort level is, I try my best to build those one on one relationships individually, with my engineers, so I can kind of understand where they're getting to, what their goals are. I think, when that trust is built, you actually are able to unlock a lot more in terms of their potential. And building a space where they're comfortable, even if they don't want to speak up in a larger group setting, at least, I can create a space with them where they feel safe to speak up to me, and then I can then figure out on my team, all these different ways and different methods of communication. I'm kind of that mediator that can kind of gather all of this great information, great data and sort of help make sure that everyone's voices is heard in one format or another, even if they're being delivered in different ways.

[00:33:51] KP: Well, you'd mentioned being a somewhat recent hire, although I assume by now you've had a time to get the lay of the land a little bit. With that in mind, do you have any thoughts or a vision for the types of contributions you're looking forward to making over the next couple of years?

[00:34:06] W: Absolutely. So, one really exciting thing for me, coming into the Pinterest Toronto space specifically, is this is Pinterest's kind of first opening in Canada. I grew up in Canada my whole life. So, I'm really excited to just be at the forefront of building up what Pinterest technology is going to look like, specifically in Canada. I know we have a lot of amazing engineering talent in Canada, as well. And yeah, I'm hoping that Pinterest Toronto will be a space that will allow our engineers and other engineers who are interested in coming to Canada to be able to come in and explore what it means to be working at a technology company, that is like known globally, that is used globally and be able to drive impact in that sense moving forward.

[00:35:06] KP: I haven't yet been to Toronto. Can you give us a high level on what the local tech scene is like?

[00:35:12] W: Yeah, so Toronto is a fun space for tech, I would say. We've got some great schools in just all around this area that have been contributing to a lot of the tech talent that we have here. And the fun thing about Toronto is, it's sort of one of the like most well-known hubs on the map for Canada. And so, we actually have a lot of international companies that come in and want to set foot in Toronto, and sort of build out the scene here. So, we definitely have a good technical scene in the Toronto space already, that's always expanding and growing. And I've seen it grow over the years now, as well as more companies, either from United States are coming, or are kind of coming into the space and building a hub here, or even a lot of local Toronto startups that have gone and done great, amazing things and have moved into other areas of the world.

So, it's really fun to kind of see a mix of that. And because of that, as well, we have so many different cultures that have set up space in the city. It's super fun to kind of see, like, we're not only focused on one area of technology or one thing, like you've got different technology spaces that are coming in as well. So, we've got gaming companies, we've got social media companies, we've got service companies, like all sorts of different things, even in the technical space, that are coming in here. It's just really fun to kind of see that growth.

[00:36:56] KP: Absolutely. Whitney, thank you so much for coming on Software Engineering Daily.

[00:37:01] W: Awesome. Thank you so much for having me.

[00:37:06] KP: Francisco, welcome to Software Engineering Daily.

[00:37:08] F: Thank you, Kyle, very happy to be here.

[00:37:10] KP: How long have you been at Pinterest?

[00:37:13] F: So, I've been working at Pinterest for two and a half months. I'm still relatively new to the company.

[00:37:20] KP: And why did you choose Pinterest?

[00:37:23] F: Well, whenever I look for a new job, there are a few factors that are really important to me. Here is the place where I found all of them. So, first of all, I think it's really important to believe in the mission of the company and the product they build. I want to work on something that matters and makes an impact. And here at Pinterest, we build an application that provides inspiration to people everywhere in the world, to help them create the life they want. I think that especially in this time, when there is so much stress and anxiety around the world, it feels nice to build a product that aims to make people life more enjoyable.

Second, I also want to work with a diverse multicultural group of really talented people. My team, colleagues, leaders, et cetera, are all amazing human beings, and I got to experience that right from the beginning while going through the interview process. I've been blown away not just by the technical talent of the people here at Pinterest, but also with how kind and helpful everyone is. I got the feeling that everyone is very passionate and proud about the product they're building.

And third, getting to work with a top tech company such as Pinterest that is opening an engineering hub, right in the place where I live, which is Mexico City, that thrusts in the local engineering talent and embed scheduling fostering a nice working environment, where teams across all locations works together to build one great product, that's something that really resonated with me.

[00:38:49] KP: And what are some of the most exciting projects at the Mexico City Pinterest headquarters?

[00:38:55] F: My team is called the discovery measurements team. We're focused on building the human evaluation platform that helps teams across Pinterest to leverage the power of human computation, both offline and online. In this way, we get direct human feedback about features that we are developing in the application in order to get a statistically significant signal that helps us guide future product decisions. These tools help us measure experiences on our application better, and this is really important for us, as it's hard to understand and improve something if you cannot measure it. Pins such as home feed related pins, search shopping, et

cetera, use the data that we provide to experiment, generate new features, set product direction and train machine learning models.

On top of that, there are several other very interesting themes here in Mexico City. For example, the client excellent and product excellence teams will own core parts of app foundations. The client excellence team is responsible for capturing and maintaining critical availability metrics across all of our clients, iOS, Android, web, grading the necessary structure and processes to make sure we are using the latest and greatest technology and making sure the app is reliable throughout the world.

The product excellence team will bring the same focus on quality and engineering best practices to our feature areas by working closely with the feature teams to adopt new technology and drive improvements across application. Something that I find really interesting is that all of these teams are full-fledged autonomous teams, composed of talented engineers with a diverse skill set and with complete ownership of their products and roadmaps, which I think is something really cool.

[00:40:37] KP: And could you give an example of one of those projects that you've been involved in?

[00:40:43] F: Sure. So, for example, we are currently building the platform that is going to be used to present in app service to our pinners, which is how we call our users. So, the end goal is that we're going to be asking for direct feedback to our users about some specific feature, or an experiment that we're launching, or some new experience that we're going to be presenting to our users. So, in this way, we present this service, and we get direct feedback from them that then we can use to drive the future product decisions, or we can assess if an experiment is good or not.

[00:41:28] KP: What's the difference between direct and indirect feedback?

[00:41:31] F: So, we have two kinds of feedback that we're currently gathering. One of them is online, which is what we call this in app service that we are being presenting to our users in order to get feedback directly from them. The other type of feedback is the offline feedback. And

for that one, what we do is that we partner up with third party companies that allow us to gather that feedback from these third-party raters that are assessing some of the work that we sent to them. So, just as an example, let's say that we are creating a new model that is going to be presenting search results in a different way.

So, then we have the current way that we do it and then we have the new proposed way. So, then what we do is that we execute thousands of queries for those two models, and we want to be able to measure which one of those models is presenting better and more relevant search results to our users. Then what we do is that we send the results of these queries to these third-party raters, and what they will do is that they will assess which one of these two models is presenting better results for each one of those queries, and then they're going to give it back to us. Then we're going to generate some metrics, do some calculations with those results. And in that way, we are going to be deciding which one of this is better or not. This is really important because it allows us to get human feedback for some of the models that we are doing.

[00:43:12] KP: Yeah, I would think if a very committed pinner would definitely want to be in one of these groups, because then their actions or their behavior is going to influence the direction of the product. Do you hear any feedback from users as you're rolling out new features that maybe they saw an early version of it or just are excited to see things coming out?

[00:43:32] F: Just the feedback that we're currently getting from our pinners is comprised of several things. So, we can ask them things about some specific future features that we are building on the app. Or we can also ask them about the ads if they think that the ads are relevant or not, or just how they feel about the application in general. We're expanding these capabilities to this new team that we're building in Mexico City, in order to be able to provide more service experiences that allow us to get more complete and thorough feedback from these pinners.

[00:44:07] KP: And how I think of the Pinterest is an existing pretty stable product, I know you're adding features all the time. But what's the rate or velocity? How often are new things going out?

[00:44:17] F: Here at Pinterest, we're trying to innovate and to change the way we're doing things as of now. So, we have launched recently, Pinterest B, and also the Watch tab. These are new ways in which we are presenting content to our users. Before we were very mostly focused on web pins, now we are supporting additional types of pins such as idea pins which is a video that our users can see in the application and also provides them inspiration. And then what we want to achieve is that this inspiration will lead our users to do and take action in real Life.

[00:45:01] KP: Gotcha, cool. Well, having a way of getting human rater feedback seems like it could have a major impact on the way you release new features. Are there any thoughts or plans for how this is going to change the release process?

[00:45:14] F: So, human feedback is something that we are trying to incorporate in the development cycle of all things. So as of now, this human evolution platform is being used by several teams, so home feed, search, ads, shopping, related pins, et cetera, and we want to empower all teams to be able to leverage human computations. So, they can have more direct feedback from humans that allows them to take better decisions about how they're moving forward with their products. So, we are an internal team here at Pinterest that is building this tooling that is going to empower other teams to make better decisions through the power of human computation.

[00:46:07] KP: And are you focused on the tooling exclusively? Or is your team part of like a services group that would help others utilize that tool and understand it properly, from a statistical point of view, and these sorts of things? What's the scope of services?

[00:46:21] F: So, our team is focused on both things. So currently, we're focused on building the tooling. But also, it's really important that the tools are actually being used properly, and that they are actually adding the value that we want to add to the teams. That's why it's really important for us to help teams to use the tools in the right way, and we're going to be providing a training support, and also different types of services for them to onboard to these new tools. At the end of the day, what we want to achieve is to make it very easy for teams to leverage the power of human computation, and the easier that we can make it for them, the better.

[00:47:06] KP: What makes Pinterest engineering different from other companies?

[00:47:11] F: The work we do here at Pinterest matters a lot. And we built a product that provides inspiration to more than 475 million people around the world. That means that the scale at which the company operates is gigantic. We're talking about hundreds of billions of user generated pins that are leveraged by our engines to provide a unique user experience that personalizes discovery and provides content and that's that people actually want to see. Delivering this amazing experience at such a large scale means that the challenges that we face in our everyday work are complex and sophisticated, while at the same time offering unique learning and growth opportunities for our employees.

Also, we organize in small teams where our contributions truly matter and impact the company's global trajectory, as well as our career trajectory. And on top of that, we have a unique, diverse and safe working environment that fosters creativity, collaboration and openness. I truly get the feeling that Pinterest cares about their employees and gives us the opportunity to be ourselves at work, grow our careers and enjoy a good work life balance.

[00:48:21] KP: Are you currently doing any hiring? Is the team growing?

[00:48:25] F: Yeah, of course. If any of what you heard today in this podcast sounds interesting to you, check out our careers website at pinterest.engineering. That's pinterest.engineering with no dot com at the end. We're hiring all types of software engineers, iOS, Android, full stack, back end, machine learning, web, security, engineering managers as well. And this is across all of our locations, the United States, Canada, Mexico, the United Kingdom, et cetera. I'm sure engineers over here at Pinterest will have an amazing time developing a product that is loved by hundreds of people around the world, while also enjoying great career opportunities and benefits.

[00:49:08] KP: And I know you're a relatively recent hire. So, you've been through the onboarding process. Are there any takeaways, things that impressed you or surprised you as you were coming on board?

[00:49:18] F: Well, I'm totally sure I made the right decision when joining Pinterest. I'm having fun. I'm learning a lot and I feel like I'm actually making an impact here in the company. Also, I

feel like I've settled down beautifully, thanks to the support of the people working here. All of my colleagues, the leadership, my team, everyone are amazing human beings, and they are really, really helpful in order to help me get on boarded and up to speed with the responsibilities that I have here at Pinterest.

Something that I found really interesting is that people are not only very talented technically, but it's also very easy to talk to people to ask for help to collaborate with others. Everyone is really friendly, and it feels like all of us are working together towards the goal of making Pinterest a great application that is loved by our users.

[00:50:13] KP: When you think about the months and maybe years to come, where are some of the key areas, you're looking forward to making contributions?

[00:50:22] F: I definitely look forward to keep working and making contributions on the human evaluation platform. We have many, many things that we plan for this platform. So, at the end of the day, what we want to achieve is to make this platform very easy to use, and also to leverage the power of human computation here at Pinterest. And also, I find it very interesting that this is related to the data that we are using to empower some of the machine learning models and some of the most interesting features that we have here at Pinterest.

So, we plan to use these platforms to, for example, generate new data sets to get string data, et cetera. Just being able to contribute in, in this way with the data pipeline that we have built at Pinterest feels really interesting, because I've seen that in machine learning, the quality of the data that you have actually makes a lot of difference and a huge impact on the quality of the models and the results that the models are providing. It feels like a great responsibility to be part of that data engineering pipeline. And I just look forward to make my contribution into this big machinery that Pinterest has built around artificial intelligence and power and create all these amazing experiences for our users.

[00:51:45] KP: While I've been speaking to some of your colleagues and heard really interesting stories about the way in which Pinterest has played some role in their lives as users. Are you a user, and do you have a Pinterest use case you want to share?

[00:51:58] F: Yes, I'm actually a big fan of Pinterest. What I have been using it recently is that I'm doing some home renovations. I'm redecorating some of the rooms that I have here in my flat in Mexico City. I'm using Pinterest in order to get inspiration about how can I decorate some of the rooms that I have over here. It's really interesting that using the visual discovery engine, you can find really, really good ideas. And then you can for example, if you see a picture that has several items that you like, then you can do a deep dive on some specific items. So, you can grab the image and then Pinterest will look for results that have that image also. So, I think it's just a very, very helpful tool for several things. I use it for home decoration and it's an amazing help so far.

[00:52:57] KP: And remind listeners again, if they're looking for maybe their next opportunity could be a role at Pinterest, where's the best place to learn about what options are available?

[00:53:07] F: To learn more about the service that we're offering here at Pinterest, please visit pinterest.engineering. That's pinterest.engineering with no dot com at the end. Over there, you'll find all the different positions we have available across all locations.

[00:53:15] KP: Francisco, thanks again for taking the time to come on Software Engineering Daily.

[00:53:21] F: Thank you, Kyle. It was my pleasure.

[END]