



CG GARAGE PODCAST #260 | MAGNOPUS TAKEOVER

SALLY SLADE, KAT HARRIS & EMILY VAN BELLEGHEM

Magnopus takes over the CG Garage podcast. Three wonder women from the innovative studio take the reins to talk technology, diversity, robot butlers – and more.

This week's podcast is something a little different – the first-ever CG Garage podcast takeover. Helming the mic are three talented, funny and smart employees of cutting edge experience studio, Magnopus. Between them, Sally Slade, Kat Harris and Emily Van Belleghem have sent Hololenses to the International Space Station, filed patents, started non-profit organizations and pioneered software development.

Contents

[Emily's background](#)

[Favorite projects](#)

[Male voice assistants](#)

[Why we need diverse teams](#)

[Epic mansplaining](#)

Useful links

[Magnopus >](#)

[Sally Slade podcast >](#)

[Kat Harris podcast >](#)

[Sally Slade on the Martini Giant podcast >](#)

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Kat Harris Introduce ourselves first?

Sally Slade Yeah. Let's introduce our esteemed colleagues.

Emily Van Belleghem Sure. Sure.

Kat Harris Would you like to go first?

Chris Nichols No, I'm just a spectator.

Kat Harris Since we're hosting-

Chris Nichols I'm just a producer here.

Kat Harris I see, okay. Sally, why don't you lead us, fearless leader.

Sally Slade Oh, thank you. Allow me to introduce ... Well, let me set the scene. To my left, Emily Van Belleghem, an engineer, designer, musician, Renaissance woman of all kinds.

Emily Van Belleghem Oh, man.

Sally Slade To my right, Katherine Harris.

Kat Harris Hello.

Sally Slade Engineer, artist, musician. And across from me, Chris Nichols, host of CG Garage and V-Ray Chaos Group community leader, I believe.

Chris Nichols Yeah.

Sally Slade And to my other right, Ella, the dog.

Chris Nichols Yes.

Kat Harris Yes.

Sally Slade May she remain silent and content?

Kat Harris No jingling. Yeah, I will try to keep it silent.

Sally Slade Okay. Now that we've set the scene, would you like to introduce yourself or would you prefer ... Sure, narrative overlay.

Emily Van Belleghem I can try. So as Sally said, I'm Emily Van Belleghem, otherwise known as EVB. I specialize in user experience design for virtual and augmented

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reality applications, experiences as you will. And I moved out to LA after finishing school at MIT and concentrating in human computer interaction and a little bit of light field displays.

- Kat Harris Dope.
- Sally Slade Yeah, a little bit of light field displays, meaning Emily has a master's in holography and a patent.
- Chris Nichols Oh, my gosh. Really?
- Kat Harris Yeah, just drop the patent bomb.
- Emily Van Belleghem Sally, keep your cool, man.
- Sally Slade We can't.
- Emily Van Belleghem This is too hyped.
- Kat Harris This is the introduction, yeah.
- Chris Nichols I am fascinated with light fields, but I'm not going to start asking questions.
- Kat Harris Nice.
- Sally Slade Yeah, no big deal.
- Chris Nichols Yeah.
- Kat Harris Do you want to keep going counterclockwise?
- Sally Slade Oh.
- Kat Harris Clockwise? Counterclockwise.
- Sally Slade Okay, sure. Yes. Hello. It is I, Sally Slade returning. I have a background in computer science. I spent some N years doing visual effects, technical director, pipeline type role. And here I am now almost on my fourth year in the XR field as a VR sort of technical designer/prototyper engineer type hero.
- Kat Harris Ooh, nice.
- Chris Nichols I like it.
- Emily Van Belleghem Emphasis on hero?

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Kat Harris Yeah.

Chris Nichols Yeah.

Kat Harris Okay. I guess I will go next.

Sally Slade Go.

Kat Harris Hello. I am Katherine Harris, also known as Kat Harris and similarly to ... That was the dog. Similarly to Sally, I studied computer science. I worked at Microsoft for six years doing technical evangelism with a focus in game development, cloud, backend bot development, and then did research and development for HoloLens 2 in Azure's Spatial Anchors as a technical designer and led a couple teams up there. And then, decided I would like a change from Seattle and moved to LA to work at Magnopus with Sally and Emily, and it has been wonderful. So, that is my journey to LA.

Chris Nichols That's awesome.

Kat Harris Yes.

Sally Slade Welcome back.

Kat Harris Thank you.

Chris Nichols Yeah.

Emily Van Belleghem It's nice to have you.

Chris Nichols You guys work together every day, right?

Sally Slade Every day.

Kat Harris Well, yeah, I guess sometimes. Sally, I don't work with Sally everyday anymore.

Sally Slade It's been a while.

Emily Van Belleghem Yeah, it's been a while.

Sally Slade For all of us really.

Emily Van Belleghem It's project to project basis.

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Kat Harris Yeah, Emily and I are on the same team now, so we work together every day.

Chris Nichols Right?

Emily Van Belleghem Yep.

Kat Harris Yeah.

Sally Slade The mighty Magnopus has swelled in size and it is now very easy to go days or sometimes weeks without seeing a friend.

Kat Harris Yeah.

Emily Van Belleghem Unless you go out of your way to go bug Sally at least once every two days.

Sally Slade Mm-hmm (affirmative).

Kat Harris Oh, man.

Sally Slade Good luck finding me now. I'm in the secure-

Emily Van Belleghem Yeah, that's true. She's in the secret room.

Kat Harris Yeah, I was about to say I tried going in there today and I got blocked off by the darkness.

Emily Van Belleghem I remember the secret room.

Kat Harris Yeah.

Emily Van Belleghem I did not like it when I had to be in the secret room either. It's just you're just siloed.

Kat Harris Well, you, too. I was just going to say we had some interactions the other day with just talking about tech and stuff and what our favorite tech was and why we got into this crazy, crazy, amazing world.

Emily Van Belleghem Hmm. Yes.

Sally Slade What a great conversation that was.

Kat Harris And when I say earlier, I mean earlier today, but also a couple of weeks ago, and then generally whenever we talk, it's nice to hear what these ladies think of like, "Oh, did you hear this news about ..." For instance,

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didn't you have something about ... Crap, I can't remember the technology now.

Chris Nichols Not light fields?

Kat Harris It wasn't light fields, unfortunately.

Chris Nichols Okay.

Kat Harris Otherwise, I'd probably ...

Emily Van Belleghem Edge computing?

Kat Harris Yes.

Chris Nichols Edge computing.

Kat Harris We were talking about-

Sally Slade Oh.

Emily Van Belleghem Yes.

Chris Nichols Edge computing, nice.

Kat Harris Edge computing and 5G I think.

Emily Van Belleghem Yes.

Kat Harris Yeah.

Emily Van Belleghem Yeah.

Chris Nichols Yes. So okay, so is 5G over-hyped?

Emily Van Belleghem Oh.

Kat Harris I don't think it is.

Emily Van Belleghem I don't think so because ...

Chris Nichols But it's so small.

Emily Van Belleghem No.

Chris Nichols Right.

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Emily Van Belleghem I think that the implications for what we'll be able to do in the coming years just only grow more and more if we no longer have to rely on the hardware of a full PC. If we can compute offline and then port over to our headsets, that's-

Kat Harris Yeah.

Sally Slade How do you feel about the phrase democratization of hardware?

Emily Van Belleghem Ooh. How do you feel about it, Sal?

Sally Slade A little dirty.

Kat Harris What a great answer.

Sally Slade But it is freeing us from the need in the future to buy these expensive graphics cards and things of this nature because theoretically, we can get them from the tower.

Kat Harris Yeah.

Chris Nichols On demand.

Sally Slade Yes.

Emily Van Belleghem Yes.

Kat Harris Yes, like we get most of our things nowadays, everything's on demand and yeah, definitely want that for computing.

Chris Nichols There was a really hilarious ... the verge, the whole thing about the top 100 technologies of the last decade, right. And they were not like ... They were very interesting the way they were ... One of the categories was that Dell shit box Chromebook.

Emily Van Belleghem Brutal.

Chris Nichols And the point is it costs like 150 bucks, but you can do almost anything you really need to do on it to a point. And it's like because it's basically connected to the cloud or whatever, right? So most of the computing is happening somewhere else. You're just terminaling into the internet-

Emily Van Belleghem Yeah. It's I think honestly, I mean it's true at the moment I think. It could be over-hyped at this exact moment.

Chris Nichols Right.

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- Emily Van Belleghem But I think the fact that we're even able to consider the opportunities that it could bring, especially for our field is really exciting for me.
- Chris Nichols Right.
- Sally Slade It's true. The expectation alone is exciting.
- Kat Harris We will see what the reality has to bring. Ooh.
- Sally Slade The virtual reality?
- Kat Harris No, the [crosstalk 00:08:22], mixed reality.
- Chris Nichols Okay.
- Kat Harris All of the realities coming from Microsoft, you got to put in that whole mixed reality thing.
- Sally Slade Well, Kat, you did allude to a conversation earlier and now, I would like you to rehash for the audience how in fact did you get into tech?
- Kat Harris Ooh. I'll keep it short, but yeah, how did I? It was more of like a thing that was always present. I always loved video games. I always loved ... My dad built computers so he just had a side gig of putting, yeah, PCs together and they were just always extra mice and extra motherboards in our house.
- Kat Harris And then, yeah, I wanted to do aerospace engineering so went into school for that and you have to learn some computer science in an engineering degree. And I realized that I enjoyed computer science a lot more than all of my mandatory aerospace classes and realized soon that like, "Oh, these video games that I love, they were made by computer scientists and game developers, and you can indeed build the games with this coding?" And I was like, "Cool. Yeah. No, I'm switching majors and doing this thing."
- Emily Van Belleghem So the aerospace thing didn't really take off?
- Kat Harris Yeah. Wow. No, get out. Yeah. And then through-
- Chris Nichols Not like it's rocket science or anything.
- Kat Harris Oh, sick jokes you, guys. I'm trying to think of one and I can't. But yeah, to continue, it kind of started there and then, I did game development in school as a side project and as a side group or club and then ... Hold on. We're dog managing right now.

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Emily Van Belleghem She's migrating.

Kat Harris Yes, there we go.

Chris Nichols There you go.

Kat Harris Yay. And then through that, I was introduced to a lot of software developers at Microsoft and got a job straight out of school doing technical evangelism, which is a lot of just make cool things using third party technology and integrating it into the ever-growing Microsoft globe of technology and document it and make it better and tell the engineering teams what to do next and help them.

Chris Nichols Right.

Kat Harris And then through that, I did VR and then augmented reality with HoloLens and met Sally and did more stuff with creating better UI systems. And then eventually, went into the team that builds the HoloLens for the HoloLens 2.

Chris Nichols Nice.

Sally Slade Was that actually in a basement? I heard that was in a basement.

Kat Harris No, we got a whole building. Oh, oh, parts of it were under, yes-

Chris Nichols That's just the bottom part.

Kat Harris Yeah, yeah. No, no, we got a whole four floors, but also there was a large section of it in the underground section of a very popular building, an open building, which you would never think that it would have anything top secret. And there was a section of the team that did go down there.

Chris Nichols The Space Needle?

Kat Harris No, no, still on the campus, the team ended up having four studios so pretty big team.

Sally Slade Outstanding.

Kat Harris Yes.

Chris Nichols Nice.

Kat Harris Very nice.

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- Sally Slade Did you ever cross paths with a woman who I believe is called Dona Sarkar?
- Kat Harris Oh, yeah, I love Dona. Yeah, Dona is an amazing human. She, Donna was the head of, I hope I'm not messing this up, but she was the head of HoloLens for a time and helped run all of the hackathons that we did to help introduce software developers to how to develop for HoloLens and this woman was at every hackathon around the country and was just the pinnacle of this is what a leader should be like if you are managing a hackathon for others and then also ... and that was my main interaction with her, but she also led a bunch of other teams and then, led Windows Insiders for a while. And now, I believe she has her own fashion company, which she hand-customizes pieces for amazing women in tech and in entrepreneurial positions that want very high quality tech forward apparel.
- Sally Slade Amazing.
- Kat Harris Yes, she is a hero as we've already liked to point those out.
- Sally Slade At the hackathon where Kat and I met, spoiler alert.
- Kat Harris Spoiler alert.
- Chris Nichols Oh.
- Sally Slade I encountered Dona briefly. I believe I shook her hand if I had the courage, I don't recall. She just made such an impression. She's got a real commanding presence and had a very thorough knowledge of the HoloLens.
- Kat Harris Yes.
- Sally Slade So cool.
- Kat Harris Yes.
- Sally Slade And I think it was from her introduction/monologue, whatever, speech in which I learned of the basement.
- Kat Harris Yes. Ah, I see. Yes, then she was definitely talking about the public building with the secret basement that no one really knows about. And then yeah, I thought you were going to say, "Do you know Julia Schwarz?" And I was going to be like, "Yes, I love that woman." She's amazing as well. She's a researcher and an engineer and a lead woman in tech who is just on the HoloLens 2 side and back in HoloLens 1 days, she opened sourced the two-hand manipulation resize and turning, rotating of objects

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as a component system. So she helped us componentize this awesome system that she made with HoloLens 1. And then HoloLens 2, she did all the major hand tracking.

Sally Slade Yes.

Kat Harris Because she's amazing.

Sally Slade And then got to show it off publicly as the ...

Kat Harris Yes, on stage as the ...

Sally Slade Yeah. Keynote ...

Kat Harris I think it was for Build.

Sally Slade Something or other.

Kat Harris Yeah, Build in Barcelona or some conference where they were announcing HoloLens 2 stuff and showing it off on stage. And I was like, "Oh, my gosh, she deserves everything because she's so cool and so amazing."

Sally Slade When she played that holographic piano with her hands in real time ...

Kat Harris My team helped make that.

Sally Slade ... chills.

Kat Harris I helped make that piano.

Sally Slade Emily's skin is like, "It's not a hologram."

Emily Van Belleghem Why you got to call me out?

Chris Nichols What are you talking about? Tupac was a hologram.

Kat Harris Yeah.

Emily Van Belleghem Oh, my God.

Kat Harris Oh, my gosh.

Emily Van Belleghem Chucks the headset, walks away.

Kat Harris Yeah. Well, Em, how did you get into the tech?

Emily's background

- Chris Nichols Yeah, I want to know about your hologram.
- Kat Harris Yeah, speaking of ...
- Chris Nichols What is a hologram? Let's actually get a proper definition.
- Kat Harris Your patent and stuff. Yeah.
- Emily Van Belleghem Oh, God, oh, God. So let's see.
- Chris Nichols Yeah, MIT, I want to know about ... How about let's go how did you get into MIT and ...
- Kat Harris Emily was born.
- Emily Van Belleghem It's very cold over there. Yes, first I was born precedes everything. No, I actually started really loving entertainment and that's kind of how I think I ended up in LA as a whole. I grew up loving Disney movies and Pixar movies, and animated movies was big in my life. And then, I really love art. I always did classical paintings, oil, watercolor, pastel, anything I could get my hands on. And one day, both of my engineer parents, shocker, came up to me and they're like, "You know, they need this thing called computer science to do those movies." And I was like, "Do tell."
- Chris Nichols Right.
- Kat Harris Ah, that's how they got you.
- Emily Van Belleghem Yeah, that's how they cornered me. No. So I took a computer science class in high school and I was like, "Some pretty dope stuff right here."
- Chris Nichols Yeah.
- Emily Van Belleghem I guess with MIT, I got there and I was like, "Hey, I like computer graphic stuff." And they're like, "Well, have you heard of VR?" I was like, "Yeah, a little bit." And that's kind of how I ended up in the virtual space area. I worked in a group for my entire undergrad and for my master's degree called Optic Based Media in the MIT Media Lab. And I had some incredible advisors, supervisors and friends. Shout out to Dan if he ever listens to this.

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Sally Slade What's up, Dan?

Emily Van Belleghem Yeah. And they kind of taught me from the very beginning because I started with a classical computer graphics background, working up from like, "Okay, well what's a ray tracer? How do I write one? And how do you do cloth SIM just making the springs. And then in this group, OBM, we specialized in objects that could help with storytelling coming to life in everyday uses. And the very first project I worked on, I was a freshman, I didn't really know how to code anything. I was basically useless. We had this holographic telepresence chair and they were like, "Here you go. Here's the code base. Have fun." And I was like, "I'm still learning what a method is."

Sally Slade Did she call that method?

Kat Harris Yeah, I was about to say.

Emily Van Belleghem Yeah.

Kat Harris Like method acting in computer science.

Emily Van Belleghem Yeah. They gave me access to the GitHub and I was like, "I should not have this power. I can destroy all of this."

Kat Harris Wait, what's the first thing you made?

Emily Van Belleghem First, I learned about version control.

Kat Harris Ah, yes.

Emily Van Belleghem But I was working with at the time the Xbox Connect and tessellating point clouds. And then, we would display those on a Pepper's ghost set up on a chair.

Chris Nichols You mean a hologram.

Emily Van Belleghem Oh my, God. This is going to be all night.

Chris Nichols I'm joking, I'm joking. I'm joking, okay.

Emily Van Belleghem Yeah. But I mostly was doing a lot of Pepper's ghost displays. My master's thesis was on a Pepper's ghost display combined with lenticular rendering, which is like The Haunted Mansion from Disneyland ...

Chris Nichols Yeah, yeah, yeah.

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Emily Van Belleghem ... combined with 3D scratchy bookmarks.

Chris Nichols Right. That's actually pretty cool if you think, yeah.

Emily Van Belleghem Yeah, so like my-

Chris Nichols So it does kind of have ... It's a Pepper's ghost 3D.

Emily Van Belleghem Exactly. It's autostereoscopic, especially if you include eye tracking. So my entire work at MIT as I concentrated in human computer interaction revolved around creating tech that could, I was hoping, help people around me and specifically because of my entertainment background, I really wanted to bring people together because people are social, and everything I had seen with VR and AR headsets, it's so isolated. And I wanted to see if I could make something that multiple people could look at and enjoy and talk about. And so, my thesis revolved around this like 75-cent piece of Mylar on top of a 4K monitor. And then I threw ... Originally, I wanted a radio lenticular, but we didn't have a 3D printer or anything that could handle that. So we made like a parallax barrier that went on top of the 4K monitor and then, reflected a polar coordinate transformed image. So once you looked at the cone, it looked like there was a 3D object inside the cone. It kind of looked like a ... I put a TIE fighter in it.

Kat Harris Nice. Nerd.

Emily Van Belleghem Leave me alone. But you can also ... We also put in a couple of other objects like cubes, not as fun, but I would get a 3D model. And then I wrote the entire thing in Unity.

Kat Harris Ooh.

Emily Van Belleghem And rendered out the images, played them back as a video file on the 4K display so that you could walk around it, have multiple people walking around this cone and they could all be looking at the same 3D image.

Chris Nichols From different points of view.

Emily Van Belleghem Exactly, yeah. The original I think was I had like seven ... I'm trying to remember. Oh, it feels so long ago. It's only two years. It was seven different views I think with a 10-degree separation between each view or something like that. And then, depending if you have the eye tracking, you can retake the pictures live and then re-render them out because it's all in Unity.

Chris Nichols Okay.

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Emily Van Belleghem Yeah. And the work was extended by my good friend, Emily Salvador.

Kat Harris Oh, another Emily.

Emily Van Belleghem It's the two Emilies. It was Emily squared on that project. And she did some amazing work and then we all, everyone who got to work on it actually filed the patent together, and it was a lot of fun. It was called Funnel Vision.

Sally Slade Oh, I love it.

Kat Harris Yes.

Chris Nichols Yes.

Emily Van Belleghem Yes, I named it. I was very proud of the name.

Chris Nichols F-U-N.

Emily Van Belleghem Yeah, F-U-N-N-E-L.

Chris Nichols Yes.

Emily Van Belleghem Funnel Vision.

Kat Harris Fun.

Chris Nichols Fun.

Emily Van Belleghem Because it was a funnel, it was-

Chris Nichols Yeah, but it's fun.

Emily Van Belleghem Yeah.

Kat Harris It puts the fun in funnel vision.

Sally Slade Yes.

Emily Van Belleghem Thanks, Kat.

Kat Harris I was trying to do a joke because you guys had the jokes earlier and I wanted to be funny, too.

Sally Slade We support you.

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Chris Nichols You should've made a picture of a cake.

Emily Van Belleghem A cake? Oh, no.

Chris Nichols Funnel cake.

Kat Harris Oh.

Emily Van Belleghem Oh, that would've been good. I'll send it back to the lab.

Kat Harris Yeah, get that feedback in-

Emily Van Belleghem I'll let them know.

Kat Harris Yeah.

Emily Van Belleghem Yeah. But after that I ... Well, Ben actually, who works at Magnopus-

Chris Nichols Yeah, so how did that happen? How did you go from MIT? Because you said you graduated, what, two years ago?

Emily Van Belleghem Yes.

Chris Nichols Wow.

Emily Van Belleghem I've been with Magnopus for about two years.

Chris Nichols So you went straight from MIT to Magnopus?

Emily Van Belleghem Yes.

Chris Nichols How did that happen?

Sally Slade Completely smoothly.

Emily Van Belleghem Yeah, Ben sniped me. He came and he was like, "You know what you can do with the things." And I was like, "Vaguely." And he was like, "Great, come on over."

Chris Nichols Right.

Emily Van Belleghem He came to MIT. Actually, Dan was holding a conference about space innovations and Magnopus had released the Mission:ISS application. And previously, I had done work at NASA JPL. I was on the team that was sending HoloLenses up to the space station.

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Kat Harris Ooh, shout out to Hololens.

Emily Van Belleghem It was called Project Sidekick, yep.

Kat Harris Yeah.

Emily Van Belleghem And then, I also was at Disney Animation Studio, shocker, doing virtual production kind of like tools, virtual, VR tools. So Ben had seen that work, too, because it's a small industry.

Chris Nichols Yeah.

Emily Van Belleghem He came on over and he was like, "Oh, you're the kid." And I was like, "That's me." He was like, "Great, you should come and do the fun stuff at Magnopus." And I was like, "Sounds cool." And I flew my butt on out to LA and ...

Kat Harris It's much warmer, wasn't it?

Emily Van Belleghem Yes. I was very happy.

Kat Harris Yeah, awesome-

Emily Van Belleghem I'm originally from Northern California.

Chris Nichols Oh, okay.

Emily Van Belleghem And so I did miss my sun very, very much.

Chris Nichols Well, there's way more sun here than in Northern California.

Kat Harris Yeah, I was like you're old enough to have a son now? Okay.

Emily Van Belleghem Honestly, though, compared to Boston, I was so happy.

Chris Nichols Yeah, I've seen it all. I went to school in upstate New York in the snow belt so ...

Emily Van Belleghem Oh, man. Yeah, it can get pretty cold.

Chris Nichols Sorry to interrupt it, but this was actually when I was talking to Ben, because I talk to Ben often because he's a cool guy.

Emily Van Belleghem He likes to talk, too.

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- Chris Nichols He does like to talk. He's a talker. He, when I was talking about, I was like, "Hey, you know, Kat was amazing on the podcast. Sally was amazing on the podcast." And he says, "Well, you got to talk to Emily because she's really cool, too." I was like, "Okay." And then I was like, "Wait, why don't we have all three of them on?" And that's when the whole brainstorming happened and then I said that's what we should do. And then I was like, "Cool, let's do that." And then it was Lynette who says, "Well, if you're going to have all three of them on, then you can't be on." I was like, "Well, why?" Because then it will be like a man that's explaining everything to them and it's terrible. I was like, "All right," but I am curious now because this is so cool. All this stuff you guys are talking about, it's amazing the idea stuff that you guys come up with, right.
- Emily Van Belleghem Well, I think it's a lot of like cross-sectional, so many different disciplines. I also don't want to ... I want Sally to do her intro, too, because it kind of is a little different as well.
- Chris Nichols Well, I'm going to say this, Sally has a two-hour podcast.
- Kat Harris Yeah, Sally. Plug the podcast.
- Chris Nichols So she can tell us what she's been up to more recently, but my gosh, it is one of the most popular podcast episodes.
- Emily Van Belleghem Oh, man.
- Sally Slade Oh, thanks Mom and Dad.
- Kat Harris You're so popular.
- Chris Nichols Yeah. But tell us what you're up to more recently.
- Kat Harris Yeah, Sal.
- Sally Slade Oh, dear.
- Chris Nichols Because it's been a couple of years since you've been on.
- Sally Slade That's true. Since we last spoke ... Let me think.
- Kat Harris Well, you just did your thing for the TH ...
- Sally Slade Yes. I traveled to Malta for Trojan Horse Was a Unicorn, a more than just a conference, a community where I met some incredible people. Shout out to my squad and I-

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Chris Nichols The tribe.

Sally Slade The tribe.

Chris Nichols That's what it's called.

Sally Slade Yes, the tribe and within the tribe, also a squad was formed.

Chris Nichols Yeah. Oh, that's true.

Kat Harris Oh, inner squad.

Chris Nichols That's right.

Sally Slade Yes. We have a group chat.

Chris Nichols Really?

Sally Slade We do.

Kat Harris Wow.

Sally Slade Cool.

Sally Slade Those are the kinds of things that are born of the THU. It is a magical place where friendships are fostered and ...

Chris Nichols I'm betting the joy is part of the squad.

Sally Slade Oh, yes, of course. Yes. We're having lunch on Thursday.

Chris Nichols Nice.

Kat Harris Oh, yeah, thanks for the invite, Sally.

Sally Slade Ooh, awkward.

Kat Harris I thought we were having lunch on Thursday.

Sally Slade Yikes.

Kat Harris Aw, awkward.

Sally Slade Anyhow, that was fun. That and perhaps this concludes my 2019 filled with public speaking and mentorships and all sorts of attempts at community outreach because I had just felt this need to contribute to that

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community of people and especially girls in high school or middle school or college who are pursuing similar career paths. And so, I just spent so much time in 2019 just trying to help people network, trying to give them some sort of guidance for career. They're at a crossroads of like, "What class should I do? Linear algebra or pottery?" I don't know.

Emily Van Belleghem I wonder what ...

Kat Harris And you said pottery, okay.

Sally Slade Yeah, sculpting.

Emily Van Belleghem Pottery is great, man.

Kat Harris Yeah.

Sally Slade Anyhow, stuff of that nature. I also started a nonprofit.

Chris Nichols What?

Kat Harris Oh, right.

Sally Slade Yes. Oh, yeah.

Emily Van Belleghem That's my favorite story.

Sally Slade Yeah, so I-

Chris Nichols This is big. Go ahead.

Sally Slade I am the CEO of a nonprofit called Local Changes. And what we do is-

Kat Harris Instead of remote changes.

Sally Slade Correct.

Kat Harris Yeah.

Sally Slade Yeah.

Kat Harris Yeah.

Chris Nichols Or edge changes.

Sally Slade Right. No, these are local changes.

Kat Harris Got to get with it.

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Sally Slade I mean they're local changes until you commit, right.

Kat Harris Yeah.

Sally Slade Then you push globally.

Kat Harris Yeah, then you push globally. I love it.

Sally Slade Yeah, it's all like poetry.

Kat Harris Yeah.

Sally Slade So the purpose of that a corporation is to make information more accessible from the government. So we've got all these California legislators that are kind of setting the tone for the nation almost in their sort of very progressive stance on various laws and bills and they eventually percolate across to the East Coast, in the center and all that.

Sally Slade Anyhow, I couldn't tell you a single bill that was passed in 2018. I had no idea what was going on.

Kat Harris Yeah.

Sally Slade All I knew was that when I would show up to punch my ballot, sometimes there would be some random stuff in there about taxes. And it occurred to me like, "This is so important. Why don't I know anything about this?" Turns out, every bill that's introduced is not only introduced, but it's also tracked all the way through rejection or signing by the governor on a publicly accessible database. So we thought, "Hey, why don't we make this pretty and easy?" So we started live comping bill summaries onto stock photography and uploading them to Instagram.

Kat Harris Insta.

Sally Slade And photography and uploading them to Instagram.

Kat Harris Insta.

Sally Slade And we thought, this could be a cool thing we do, not just for California Bills, not just for Instagram, but just as a personal initiative to use technology, social media and art to make this important civic data more accessible. So, we decided to incorporate, to protect our mission and make ourselves look really legitimate, and ensure that we don't deviate from these standards that we publicly set for ourself. And thus, Local Changes was born.

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Chris Nichols Wow, that's huge.

Sally Slade Thank you. And, you can find our Instagram, which will be renamed, but is currently still living on as it's whimsical first title, which is Billbot Baggins.

Chris Nichols Billbot Baggins.

Sally Slade Yes, it is a-

Kat Harris Please spell that for the class.

Sally Slade Yeah. It is a Billbot, because it's a bot, a script that's running autonomously and doing things. And then, it's about bills, so it's Billbot, and then Baggins because we're-

Chris Nichols Nerds.

Kat Harris We need an explanation for that one now.

Sally Slade So it's B-I-L-L B-O-T dot Baggins. Billbot.baggins. Sorry.

Kat Harris And Baggins is spelled?

Sally Slade B-A-G-G-I-N-S.

Kat Harris I just wanted to make sure.

Sally Slade Yes, that is our Insta handle. If you were to subscribe to that, you'd just get a steady drip feed of these bills, and it would just be interwoven with all your other news, or whatever about dogs and babies and flowers and whatever.

Chris Nichols Suddenly, you're like, "Something important just popped up."

Sally Slade Yeah. It's just a nice way to casually stay abreast of important information in your state. Once we've got all the kinks ironed out of that, we're releasing our code base opensource, and we're going to seek and encourage people in other states to make accounts for their state. We've also got Federal Billbot working. We just have to get him organized and automated and such.

Chris Nichols But it's automated?

Sally Slade The only thing that's not automated is the upload to the gram, which is so frustrating, because they removed their public API keys for that behavior. So, you have to either be a large corporation spending a certain amount of

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money every year in sales on Instagram, or you have to know somebody, or you have to be some dirty, hacky, scraper person, which we're also looking into.

- Emily Van Belleghem Give me a ring.
- Sally Slade So, maybe that's the other large thing I've been up to since we last spoke.
- Kat Harris This is why Sally is the hero of the story, making it possible for all of us to have someone that we can look up to and be like, "Oh, so cool. I can also do that? That's amazing."
- Sally Slade My journey has been made a lot easier by my various friends who are hyping me up, and helping me network, and encouraging me when I'm tired. Takes a village.
- Chris Nichols I wrote a blog post about caustics.
- Sally Slade Caustics are important.
- Kat Harris Also important work, yeah.
- Chris Nichols No. Not at all.
- Kat Harris Encouraging people to be more important.
- Chris Nichols Well, it was fun. I think it was fun. But yeah, that's amazing, guys. I mean, I am so happy you guys are here to talk about this stuff. It's really cool.
- Sally Slade Thanks for having us.
- Emily Van Belleghem I also feel like this is a good segue into our next one. What's been your guy's favorite project?
- Kat Harris Was Billbot your favorite project?
- Sally Slade It certainly is my favorite project right now, of things I'm actively pursuing.
- Kat Harris What tech is behind Billbot, for people who are, "Oh that's such a cool idea." I want to do some automated opensource processes now, for Instas. What are you... Yeah.
- Sally Slade I thought-
- Kat Harris I mean when I heard about this, I was like, "Oh my God, I could totally do this."

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Sally Slade Python you all.

Kat Harris Just the Py?

Sally Slade Import. Chill. No I don't know.

Sally Slade Python it's got such a prolific community of developers that are constantly uploading new classes, and tools, and APIs to interface with whatever. As soon as something drops, you can bet your bottom dollar that a Python library is coming out to accompany it, either by the publisher themselves, or like an eager community of indie devs.

Sally Slade So, we were able to get all help from just the community, by searching for various tools, like HTML parser, Instagram, Scraper or whatever. There's always some baseline stuff that's already been done. And, in the few cases that it hasn't been done, it's a very good feeling of like, "Now I get to do it." And then you put your code online and then you've helped someone else.

Kat Harris Is your code online?

Sally Slade It will be.

Kat Harris Just checking, just in case I wanted to do-

Sally Slade I do have one contribution to the online Python repo world of joy, which is a cloud-based rendering pipeline from 3D's Max to Conductor.

Emily Van Belleghem Nice.

Sally Slade Very useful.

Emily Van Belleghem Yeah.

Kat Harris For people who want very specific... Yeah.

Sally Slade That's my only public contribution at this time. But Local Changes will be pushing its repo in 2020.

Kat Harris Nice. Do we have a fiscal year?

Sally Slade Probably second quarter.

Kat Harris Second quarter. Okay, good to know.

Sally Slade Yeah.

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Kat Harris What about you EVB, was your light field patent project to your favorite project?

Emily Van Belleghem Oh man, it's definitely up there, but I think, it has been surpassed I believe, by my most recent work on a project called Elixir.

Kat Harris Tell us more.

Emily Van Belleghem Yes, Sally and Kat know pretty much what it is. Oculus released on the Quest hand-tracking. I don't know if you've seen it yet.

Chris Nichols No.

Kat Harris Very dope-

Emily Van Belleghem It is very dope, yeah.

Chris Nichols Okay.

Emily Van Belleghem So what it's doing is it's using the four cameras on the outside to track your hands, while it's also tracking the entire environment, because it's six stuff,

Chris Nichols Right.

Sally Slade So it's not plugged in?

Emily Van Belleghem Yeah.

Sally Slade It's just free and-

Emily Van Belleghem Untethered.

Sally Slade Yes.

Emily Van Belleghem Yes. And you have-

Chris Nichols Untethered and you have no computer attached to it? No giant GPU power in it?

Emily Van Belleghem Yeah. It's very, very lightweight and it has full can capabilities like it you actually have your fingers in there. Yeah, all 10 of them.

Chris Nichols All 10?

Sally Slade If you have 10-

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- Chris Nichols If you have 10. Some have 12.
- Emily Van Belleghem So this capability was a demoed at OC6 and we were working on a project called Elixir to show off this new tech. It was basically a Sorcerer's potionary that you could go and transform all of your hands in. So you go in and you're like her apprentice and you dip your hands in dragon vomit and then you light them on fire.
- Sally Slade That was vomit? I thought it was just goo, now that I know it's vomit I'm not going to do that.
- Emily Van Belleghem Even better. Well the idea was, we wanted to put people in a situation that you wouldn't do in real life if dragons were real of course. But the idea was, "Hey, here's some things, you would never stick your hand in a fire." You would never probably stick it in an electricity either.
- Emily Van Belleghem And we wanted to give people that capability because it's always that question of, "Why are you doing this in VR?" There has to be a purpose, right? And there is no other place I could imagine being able to create this world and have the experiences than in VR with hand tracking.
- Chris Nichols Right.
- Emily Van Belleghem So I was actually the lead designer on this app, Lead Design. And it was very, very awesome because it was incredible to get to work with such a wide array of talents on the team. We had everything from modelers, to animators, to set designers, to engineers as well and the effects artists, everything you could think of. And it was a lot of making sure that everyone understood the vision and believed in the vision and wanted to see it come to life. That's what gave it the juice or the dragon juice.
- Chris Nichols Yeah, dragon power.
- Emily Van Belleghem Yeah. And it was incredible. Mark Zuckerberg demo did on stage.
- Chris Nichols Wow.
- Sally Slade On camera on stage.
- Emily Van Belleghem Yes. It was in front of me-
- Sally Slade Streaming live-
- Emily Van Belleghem And then he posted it on his Instagram. I almost fainted and we were able to generate a lot of excitement for it, which is always my hope in any project that I take on.

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Chris Nichols That's a great project.

Emily Van Belleghem It was a lot of fun. Yeah.

Sally Slade There were so many puns in-

Emily Van Belleghem Oh yeah-

Sally Slade ...the narrative.

Emily Van Belleghem Oh man, my favorite one-

Chris Nichols Okay.

Emily Van Belleghem Put your hand on the grill, like you're cooking a hand burger. That was my favorite.

Sally Slade They were largely hand related.

Chris Nichols Right.

Sally Slade Yes.

Kat Harris Yeah. Did you have a hand in working on them?

Emily Van Belleghem Yes. You could say I handled it.

Chris Nichols Yeah.

Sally Slade I feel like you had your finger on the pulse-

Chris Nichols On the pulse-

Emily Van Belleghem Oh yes-

Chris Nichols I was going with something like that. But you did good-

Emily Van Belleghem Thumbs up to you.

Kat Harris Oh shoot I was just thinking of another one, oh man. Wrist, something with wrist?

Chris Nichols No.

Kat Harris Yeah, no, I'm bad with this. I try so hard.

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Emily Van Belleghem Yeah well. But, Kat, was the HoloLens two your favorite project so far?

Kat Harris I mean, yeah I guess, but like the thing that has a special place in my heart that is my favorite project would probably be my first project. The first project where you're doing it on your own, you're really exploring new technology. You've learned the most from it. And so that's my project.

Kat Harris I did Connect because I worked at Microsoft, so Connect stuff with Oculus DK2 at the time and how to do better inputs for just virtual reality. So tracking gestures, all that jazz. But it was my second project at Microsoft and they were like, "Oh yeah, you like this gaming thing." And I was, "Yeah, I've worked with Connect before too, there's this new thing called an Oculus that came out, can I get one and use it?"

Kat Harris And they were, "Well we don't do this VR stuff. We do like windows stuff." And I was, "Well Unity exports to a Windows application and then can I do that stuff?" So, it was my first large project at a company that was, "Hey" and then introduced me to this new industry that is now my life and it was really fun and I learned a lot and then I talked about it for a year and it was just, "Oh wow, it's a thing that not a lot of people know how to do."

Kat Harris And to this day I still get Twitter replies and comments and requests of, "Hey, so that open source module that you put up for the Connect gestures and stuff for VR, can you update it?" And I was, "That was for Unity Fiber. I did it almost five years ago now."

Chris Nichols And that's ages-

Sally Slade Ages ago in this industry. Emily was just talking about hand tracking on-

Chris Nichols On the cross-

Sally Slade Yeah.

Kat Harris Yeah, the Oculus. And I'm just, "Yeah, it's ages ago." But people still use that technology and want to see it updated. So that project holds a special place in my heart... And all that jazz. Yeah. But that's my favorite project. Sorry, Sally and Emily, not the project I'm working on with you two.

Sally Slade Oh.

Kat Harris Just going to say that.

Sally Slade I'm not on that project if you hadn't noticed, but thanks.

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Kat Harris Also, you both didn't say, "Oh, a project where I worked with you, Kat." So that's why I was, "Well I can't say anything I've done at Mac Novas" because these two clearly didn't want to say me.

Emily Van Belleghem So Kat holds grudges, if it's not clear.

Kat Harris Only sometimes. And I get over them fairly quickly.

Emily Van Belleghem What's that quote from that... 98 percent of the time it's already raining. What is that?

Sally Slade Mean girls?

Emily Van Belleghem Oh.

Kat Harris What?

Emily Van Belleghem Nevermind.

Sally Slade It can't rain all the time from the crow?

Emily Van Belleghem No, no, no.

Kat Harris Different movie references, I probably won't understand any of them. Chris earlier this tonight-

Chris Nichols Alright-

Sally Slade Made a reference and I was, "I honestly have no idea what you're talking about."

Chris Nichols I was commenting on you guys are wearing-

Sally Slade Oh wait-

Chris Nichols Just so people know-

Sally Slade You didn't set the scene-

Chris Nichols People are wearing ugly sweaters-

Sally Slade Oh yeah, ugly Christmas sweaters-

Chris Nichols You guys have the ugly Christmas sweaters on.

Sally Slade Yes.

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Chris Nichols Just so you guys know this will probably coming out next year, so people know. This is just before Christmas that we're recording this podcast. You guys had your Christmas party, I'm assuming of some kind where-

Sally Slade It was like spirit week-

Chris Nichols Spirit week. You guys were wearing your ugly Christmas sweaters and Kat has a gloriously ugly sweater off-

Kat Harris Yes I do-

Sally Slade I think hers takes the cake.

Chris Nichols And I made a comments like I saw an amazing one ugly sweater, which had their re animator on it and she said, "What's that?" I was like, "It's like a little old."

Sally Slade You're upsetting Bella.

Kat Harris I know. I constantly do.

Chris Nichols So that's all, I was just about the re animator, which is cool.

Kat Harris Yeah, I was confused for a while, but then I got it. Ask questions was the lesson.

Sally Slade Well of course poor Bella, if you hear some whining in the background, it's none of us. It's-

Emily Van Belleghem It's because I was too cheap to get a dog sitter and I regret it.

Chris Nichols Do you want to just let her roam around? Should I open the door?

Sally Slade I'm scared.

Chris Nichols Okay.

Kat Harris Let her roam, Sally.

Sally Slade What if she does something inadmissible?

Chris Nichols Well, we can clean it up.

Kat Harris Yeah, resolve.

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Kat Harris Is that still a cleaning product that people can use? Or is it been banned because bleach is toxic or something?

Emily Van Belleghem I don't know.

Sally Slade How about, we'll just see if she wants to roam the room.

Chris Nichols There you go.

Sally Slade You unleashed her chair. There she goes, now she's much happier.

Chris Nichols Bella. She needed a good shake.

Emily Van Belleghem Yeah.

Kat Harris Oh man. Come to me, prove that I'm your favorite. Yes, she is. Oh, she stopped.

Sally Slade Well, that was your favorite project. What would be if you had your druthers?

Favorite projects

Kat Harris Oh no.

Emily Van Belleghem My what?

Kat Harris Druthers.

Sally Slade Druthers.

Sally Slade Your preference, but living South of the Mason Dixon line, your druthers. I believe it is a contraction of, I would rather like, "Yeah, I'd go to Burger King, but I'd druthers go to McDonald's."

Emily Van Belleghem Understood.

Sally Slade If you had your preference, what would your dream project be in this right field of technology?

Kat Harris Oh man. Emily, what are you going to say?

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Emily Van Belleghem Oh man.

Emily Van Belleghem I personally, as Sally mentioned earlier, I am a musician.

Chris Nichols What do you play?

Emily Van Belleghem At least I like to claim to be one. I was trained in piano for a very long, long time, classical piano many, many years. Now I dabble in a couple of other instruments, but that's pretty much my main one.

Kat Harris She also has her pipes.

Emily Van Belleghem I do sing a little bit.

Sally Slade She's very good.

Kat Harris She's very good.

Emily Van Belleghem I'm not going to sing, but-

Sally Slade More wine.

Emily Van Belleghem I would like to do a music project specifically to kind of up, right now from how I've learned music and have seen it, I feel like it's a little bit to the everyday person, outdated. The way we listened to music used to be just sit and we hear and music's a lot, it's multidimensional, it's more than that. And I wish that there was more of an experience to it. I also, when I was at school, I was in a hackathon and I made a project called pitch paint, which was painting.

Chris Nichols Love the name.

Emily Van Belleghem Yeah. I was painting sound in VR. It was a lot of fun because it was just creating a new, what's the word? Nomenclature? Vernacular? Something? Words? Creating new words for what, how do you describe sound and how do you experience it and see it. And it's not necessarily this thing from centuries ago that's written on a piece of paper that you have to learn syntax for years and years and years to understand.

Emily Van Belleghem So yeah, something around that would be amazing. And I would like if it was in a virtual space of some sort.

Kat Harris Yeah, I was going to say-

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- Sally Slade That's very true. I never really stopped to think until I started talking to you how, for lack of a better word, gatekeeping music education is, it's so arcane and specific and is it really the best way?
- Emily Van Belleghem Here's the thing though, it's kind of one of those things that it's been built up over so many years and it does the job.
- Emily Van Belleghem If you think about how complex sound truly is, being able to even identify it at all and understand it's a mathematical tendencies, if you will.
- Chris Nichols It's very mathematical.
- Emily Van Belleghem Yeah, it's incredible that we have what we do have, but I do believe it could be extended further.
- Sally Slade Yeah. It just reminds me of like cursive or Kanji and just like will we see it deprecated in our lifetimes?
- Emily Van Belleghem There's also, there's quite a few applications out there that, I have considered this and have worked on it, but I haven't seen any in a while. Most of them have been from I think a couple of decades ago, but for 2D mouse computer input. So now we don't have to do mouse and computer. It'd be cool if we could have compositions in space. I think.
- Kat Harris Space composition. I love it.
- Sally Slade Better call those astronauts you were sending hollow lenses to.
- Emily Van Belleghem What about you Kat?
- Kat Harris Oh man. Sally what about you? Give me a second.
- Sally Slade I wanted to speak from the heart so I didn't prepare an answer.
- Kat Harris Same, which is a mistake on our part. Why? Why didn't we take a page out of Emily's book?
- Emily Van Belleghem Oh, I didn't prepare that.
- Chris Nichols Good for you. That is from the heart.
- Kat Harris I mean for me it's like dream project. I love working. I've worked in mixed reality and VR and this newish industry like 2014-15, end of 14 beginning of 15, for a while, but kind of doing the same thing of like, "How do we integrate third party technologies all together?" "How do we make a phone, talk to a computer, talk to the headset, talk to a sensor that's

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sensing where my body is talking to another thing?" Seeing it all work together, but I don't have a lot of experience in context of working in other industries like construction, healthcare, entertainment, we're in LA.

Kat Harris So for me, it's just more of applying all the stuff that I've learned now instead of just building the foundation and building up a new platforms of how to integrate the technology to talk to each other. It's more of how do we apply it in different creative ways that someone from the tech industry wouldn't necessarily know because they haven't been exposed to construction workers on site, or they haven't been exposed to the people who make out plastics and outlets. I'm just looking around the room. The sound foam, how can you apply that technology to making sound foam boards? I don't know, because I don't work in those industries and I feel like-

Chris Nichols I love that stuff though.

Kat Harris Yeah, and I feel like I'm lacking in meeting people outside of tech and meeting people who, like writers for instance, they're like, "Oh yeah, we write and then we print stuff out and then we send it to each other and mark it up with a pen and paper." And I was like, "Cool, so what do you use for version control?" And they were like, "What's that?" And I was like, "Oh my gosh, you don't know about version control and all the possibilities of, you guys write narratives and you branching narratives and that you have to remember which versions things were at and if you're writing stuff together, how do you do that?" And they're like, "Oh well I write the first draft and then I send it to this other person and then they edit it and then they send it back to me and then I write another draft." And I was like, "Why don't you just write it together?"

Chris Nichols I know. I hate that because, sorry, I've had this problem because we write a lot of blog posts and stuff like that and we have to write these things and I'm having to teach these people like, no, don't just send me a dot doc file because I don't know. And then I send them, it's like, Oh, I just rewrote it and then sent you...no, just edit it, erase what I did, but then it's like you don't know what you wrote. But I can, there's a history. There's a history.

Kat Harris Exactly. So it's like finding those problems faces outside of tech.

Chris Nichols Yeah.

Kat Harris And then applying my knowledge of XR and MR or just computer science in general. So similar to Sally's Billbot where she's like this is so easy. I can just write a Python script and scrape the gov dot gov information and display it in a pretty picture on Instagram. And I'm just like, "Oh, I would like to go forth and find a thing that I am so passionate about."

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- Kat Harris For me what I'm passionate about is like Dungeons and dragons, anything in entertainment, a lot of just random stuff. So, I need to, my dream project would be to find something that I'm super passionate about. Currently it's Dungeons and Dragons and find out a way to make it easier for people to be onboarded. And now that it's mainstream, and I'm so happy that it is, you have some of those projects.
- Kat Harris But one of my bot projects was working with wizards of the coast to try and make a bot to make it easier for people to learn how to become dungeon masters. I might revive that or revive a different project or want to do something with virtual production more. And that type of stuff.
- Chris Nichols You know it was interesting is I went to a conference that, I normally never go to these types of conferences, because part of one of our, in my company, part of one of our big groups is the architectural world, right? But the architectural world is many different levels of architecture, right? There's the design of cetera and then there's the very practical pragmatic, architecture, construction guys.
- Chris Nichols They were talking specifically about how much AR they use now in designing very boring buildings, right?
- Kat Harris Like an office space, like an office park?
- Chris Nichols More specifically a hospital. So if you're designing a hospital-
- Emily Van Belleghem Boring and sad.
- Chris Nichols Yes, but very vital in a lot of ways because what they do is that the hospital has huge amounts of mechanical stuff going on inside of the building that all needs maintenance, right? So they use AR to find and control the maintenance of all their equipment. So, they'll just walk around the hospital. They used to look at a computer and go, "I got to go find pipe J 17 and make sure that the filter is changed on that pipe" or whatever it is. Now they just walk around and go, "Ah, that needs maintenance, done."
- Emily Van Belleghem Nice.
- Chris Nichols It's so much easier and you can train someone so much faster using that and it's just like-
- Emily Van Belleghem It's so crazy. I talked to so many friends about my job cause they don't really, virtual reality and augmented reality, it's not really something that you see every day if you're the average Joe I suppose. It's so crazy how so many of these applications, it just makes sense. You see these things in

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space. We act in 3D space, we live in 3D space. I feel like naturally it just makes sense.

- Kat Harris I remember what my project was. Sorry, Emily, you inspired me.
- Chris Nichols Let's let Emily finish.
- Kat Harris Yes, keep going.
- Emily Van Belleghem That was the thought. It was just like that's why it makes so much more sense. Whenever we mess with 2D interfaces, a lot of it is just stuff that you have to train someone to use and when you put a cube in front of someone and they have hand tracking in VR, they're going to go pick it up. It's just natural.
- Chris Nichols It's way more natural.
- Kat Harris I remember what it was. Emily you kick jumped, started my brain into remembering what it was that I want to talk about.
- Kat Harris It'd be so amazing, traditional media is a way of explaining a topic or explaining a point of view to a large amount of audience members in a very easy, consumable way. So you have TV shows, movies, comic books. I would love for there to be a comic book series or a TV show series about VR at the state that it is currently at. Not for maybe adults.
- Kat Harris So Mr. Robot I think is a great example of, this is what hacking is actually like currently for a large member of the population who thinks that hacking is like a GIF running in the background and a person's typing on a keyboard like really frantically and be like, "I have to hack the blockchain." Which is a sentence that I heard someone say in a TV show recently and I was like, no, it was a movie, it was in the new Charlie's Angels movie and I was like, you could have literally spent two seconds and asked any tech person and they would have been like that makes no sense, don't say that.
- Emily Van Belleghem Ask google. Ask Jeeves?
- Kat Harris Ask Jeeves.
- Chris Nichols What was that, it was, not Hellboy. What was the weird movie? The guy with a cape. It was in superhero stuff. John Leguizamo played the clown guy on it.
- Kat Harris Batman?

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- Chris Nichols No, it's before Batman. But anyway, they said, "well how is he doing this?" They were like, "It's the latest nanotechnology." It's like, "Do you even know what that means?"
- Kat Harris No, they don't. So that's what I would love. I would love for there to be a show similar to Mr. Robot, but maybe not as dark as Mr. Robot. Maybe a happier version or an animated version of what AR and VR and mixed reality and our current sensors and what current AI data can do in a show or a movie or a comic book that's real. And it's based in reality quote unquote, but it's a little bit dramatized and it's just like, "Oh yeah, because the current technology is super cool" and a lot of people are like, "Oh, that's a dystopian future thing."
- Kat Harris Like a lot of VR is all about dystopian futures and I'm like, "no, this is so cool."
- Emily Van Belleghem Have you seen Black Mirror?
- Kat Harris Yeah, all the Black Mirror stuff. There's so much positive that can come from those technology.
- Chris Nichols Have you guys read the book, "The Inevitable?"
- Kat Harris No.
- Sally Slade No.
- Emily Van Belleghem No.
- Chris Nichols Oh, it's a great technology book.
- Kat Harris We say unanimously.
- Chris Nichols Have you heard of it?
- Emily Van Belleghem I'm thinking. No.
- Chris Nichols I think it's written by one of the guys who founded Wired or one of those guys. But basically it's about like, here's technology is going to happen whether you like it or not, and here's how it's going to be. Here's how it's going to change the world, and whether you like it or not. It's a really well written book, but it also puts a positive spin on it like, "Just because there's evil things you can do with it doesn't mean it's bad, right?"
- Kat Harris Yeah.

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Chris Nichols Deepfakes, right? Now everyone's freaking out about deepfakes right?

Chris Nichols So I'm like, "Yeah, but you know, what's going on with deep learning, and everything else that's going on, it's actually pretty cool." Right, and so the internet can be used for a lot of evil, and it does get used for a lot of evil, but it doesn't mean that it's all evil.

Kat Harris Right. And it can be used for good.

Sally Slade Exactly.

Kat Harris My dream project would be to work on a project, either in the voice acting realm, or in the writing realm, or in the directing realm, or in the technologies. Please just ask me if this is real or not.

Chris Nichols So you want to make a movie about how tech-

Kat Harris Or a TV show. I remember there was a TV show when I was a kid called Code Lyoko, and that was great. And, I would like to remake that, but with actual technology of the day and... It was a French animation show. It was great, brilliant. Anyway, Sally, what's your dream project?

Sally Slade Oh, I thought in that time period I might be able to generate something that sounded more scholarly.

Chris Nichols Well, I think what you already talked about is pretty amazing. Your... Bilbo Baggins.

Sally Slade I have a dream project.

Kat Harris Her Baggins?

Chris Nichols Billbot Baggins.

Emily Van Belleghem Wait.

Sally Slade I have a dream project. I just thought I could hide it, but I just want to tell the world-

Emily Van Belleghem I want to hear it.

Kat Harris No. Yes, tell the world.

Chris Nichols Is this the world premier?

Kat Harris Sally, I will support you in any way, shape and form for the stream.

Male voice assistants

Sally Slade It is the world premiere in a recorded forum, which is that... Okay, so we've got these assistants. A person who doesn't know any better, might call them AI assistance.

Emily Van Belleghem Oh.

Chris Nichols Sure.

Sally Slade We have Siri, we have Cortana-

Chris Nichols We have Google Assistant.

Sally Slade We have the mysterious Mica from Magic Leap.

Emily Van Belleghem Oh right, yeah.

Chris Nichols Oh right.

Sally Slade But what we don't have is a studly, sassy man assistant. I have never seen a virtual man or any kind of like... I mean you can mod your phone so that it's like a British guy telling you where to go.

Emily Van Belleghem Or an Australian voice-

Sally Slade But there is no named famous-

Chris Nichols What about the guy from... The Marvel guy? The guy-

Sally Slade Jarvis.

Kat Harris Jarvis.

Sally Slade Yeah.

Kat Harris But that's not real. That's in a TV show.

Sally Slade I think-

Chris Nichols But it could be real.

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Kat Harris Well-

Sally Slade And also Jarvis was eclipsed by Friday. I mean if you read the comments.

Kat Harris Well It's also in the movie. He's eclipsed by Friday because then he integrates with, what's his face? Purple dude, that likes Scarlet Witch.

Sally Slade Oh man.

Kat Harris Vision! He becomes Vision, fuses with Vision and then-

Sally Slade Typical man.

Kat Harris Him and Wanda go out. In a blaze of glory because then he, spoiler alert, Thanos totally gets his stone.

Emily Van Belleghem Your nerd is showing.

Sally Slade I'm not caught up with the MCU.

Kat Harris What?

Sally Slade I did just read the Ironheart Collected Trade. It was amazing. But yes, I've never seen such a character. Nothing like this is pushed on the American public and I really want it to. Even looking globally, all the pop stars and all this, they're all men. Lil Miquela... Sorry, they're all women. Lil Miquela, a woman in America... What's that league of legends band?

Chris Nichols You know that guy came by here?

Sally Slade From Brud?

Kat Harris Oh my God.

Chris Nichols One of the guys who created Lil Miquela-

Sally Slade Amazing.

Kat Harris Sally.

Sally Slade Was it DJ Skeet Skeet?

Chris Nichols Yes! He came here. He was here, he wanted to talk to me about the Wikihuman project.

Sally Slade We are all big fans. Perfect.

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Chris Nichols And I had no idea what this was, no idea. It's like, what are you, what? Instagram something what?

Kat Harris Yeah.

Sally Slade They do have a male character called Blawko? I don't know how to say his name.

Kat Harris He's not as big as Lil Miquela.

Sally Slade No, he's not as big. He's got like a crazy attitude. He never shows his face.

Kat Harris Yeah, he always wears a mask. I can't connect with someone whose constantly hiding his face.

Kat Harris Yeah and then he's dating someone... the other one, what's her name?

Sally Slade Bermuda.

Chris Nichols So this is all fake?

Sally Slade Yes. It's all rendered...

Kat Harris Yeah, but the personalities are real. The people are fake the personalities are real.

Sally Slade The original dream project stance. I would like to be part of something that puts a male character in the spotlight that women can like enjoy having in their car or whatever. They can write fan fiction about it. There needs to be something in the narrative that's an AI, that's like a good looking dude.

Emily Van Belleghem I feel like there was a...

Chris Nichols I don't see the... I don't know... Actually my daughter changed the voice of her Google Assistant to a man.

Emily Van Belleghem Wasn't there like a commercial last year during, I don't know, the holiday time that was, it was one of the assistants, but then they replaced it with famous people's voices.

Chris Nichols Yes.

Emily Van Belleghem So, I remember Wanda Sykes was one of the voices and she was making fun of someone trying to cook or something. But that concept of like, Oh, I can change my Siri voice to Wanda Sykes. My life is 10 times better.

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Kat Harris But I see where Sally's coming from. It's like, yeah, you can change the voice, but like we want a personality, we want like a whole persona.

Emily Van Belleghem The whole package.

Kat Harris Like Alexa, is a whole persona. Cortana is like a whole persona, but they're all women, let's have Cortano or...

Sally Slade I think Jeeves was the only-

Kat Harris Ask Jeeves?

Sally Slade Is the only one I can think of. And he was one PNG.

Kat Harris Yeah. One PNG.

Emily Van Belleghem Nice.

Sally Slade Yeah. Yeah.

Emily Van Belleghem Apparently that's all you need.

Kat Harris Well, yeah. I don't know.

Sally Slade But I mean, they're missing out on 50% of their market. Presumably. Like what-

Kat Harris I mean, yeah.

Sally Slade Why not? Like where it at?

Kat Harris Well, I mean, yeah, I feel like that's a lot of, the society that we live in though.

Sally Slade Yes, and that is why it is my dream project because I want to push the envelope.

Chris Nichols Can I ask this? Do you think... Now that I think about it, people who ask things to Siri or to whoever, when I really think about it, if you're looking at someone talking to her phone like Siri or Alexa. Mostly men. Asking the question.

Kat Harris Really?

Chris Nichols If you think about it, visually speaking.

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Sally Slade You are correct in my recollection of databases.

Chris Nichols Women are not as likely to ask questions to an assistant.

Sally Slade I would like to counter that.

Chris Nichols Yeah, that could be an interesting study. I haven't seen many women asking questions.

Sally Slade In commercials, it's always a woman in a kitchen, cooking, so she can't use her hands.

Chris Nichols Right.

Sally Slade But she's also cooking in a kitchen and I'm like, of course she is.

Chris Nichols Yes.

Sally Slade And then she's asking in the commercial, that I'm remembering, it's a woman talking to her father about how to cook like a steak or something.

Chris Nichols For her boyfriend.

Sally Slade For her boyfriend. Exactly! And it's just like-

Emily Van Belleghem That was Portal though, right?

Sally Slade That was Portal but it's still like a voice commanded AI system.

Emily Van Belleghem It's the idea, yeah.

Sally Slade Hey Alexa, show me the recipe for a thing. Which again, cooking is a very good example of-

Chris Nichols That's useful.

Sally Slade At least for the HoloLens, it was a great example of, "Hey, you can't actually hold your phone in your hand, while you're cooking" so you need something on your head or something that's voice commanded that can respond to you, where you don't have to use your hands or use your eyes.

Emily Van Belleghem And I always felt like whenever I watched that commercial, it would be 10 times funnier if it was a guy trying to-

Sally Slade Asking his Dad how to cook a thing for his wife.

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- Emily Van Belleghem Yeah, I don't know, I just...
- Kat Harris That shouldn't be funny. Men should be allowed to not know how to cook a steak.
- Emily Van Belleghem Exactly. It's a good point.
- Sally Slade Exactly. And it was just like, "Oh, that's the only time, but women driving is another one. Hands-free, any hands free activity.
- Chris Nichols Honestly, I'll tell you what, I've actually watched that commercial. Here's what bothered me about the commercial.
- Sally Slade Yeah.
- Chris Nichols It's basically a rip off of Bridget Jones's Diary where she messes up the dinner.
- Emily Van Belleghem I've never seen.
- Sally Slade I've never seen it. Our age is showing.
- Chris Nichols She messes up the dinner because she's flaky and Bridget Jones, and the man comes by and helps her figure out how to salvage the meal. Right? And in this commercial it's the same thing, right? Where she messes up something and it's like, Oh, do you have pasta? Let's make something.
- Emily Van Belleghem Yeah.
- Sally Slade Right. Yeah. She messes it up and then they have to make pasta.
- Chris Nichols So, the man has to come in and explain to her, how to save the meal and have a great date. And that is, I don't know, I had problems with Bridget Jones's Diary. We recently on my other podcast called Martini Giant, we actually did a twofer, where we did Bridget Jones's Diary and a Philadelphia Story, two different stories about women, right? And Bridget Jones's Diary, which is more recent. Woman is like, "Oh, I'm a ditzy girl" and the man comes to save me. Had a problem with that. Philadelphia Story, which is from the forties is fricking amazing. And Katharine Hepburn is a woman in power and the men are completely enamored by her being so powerful. That... great story.
- Sally Slade I haven't seen it. I'm so sad. I feel like-
- Emily Van Belleghem I saw it a year ago.

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Chris Nichols I love that story but anyway.

Sally Slade Yeah, no, no, you keep referencing amazing movies and music, and I'm like-

Chris Nichols I watch movies. It's part of my job.

Sally Slade I haven't seen any of them.

Kat Harris Welcome to drinking with Chris.

Sally Slade So, I need to go home, watch all these movies, come back and be like, okay, I understand that.

Chris Nichols 1940's. Philadelphia Story. Very funny, by the way. Jimmy Stewart, Cary Grant, Katharine Hepburn, I mean big, big, big, big characters and Jimmy Stewart is a handsome man at that time, he was very young.

Emily Van Belleghem Oh my.

Sally Slade Oh my. Do you have this movie?

Emily Van Belleghem I'm a married woman.

Sally Slade Oh, right. You just got married. I keep forgetting.

Emily Van Belleghem YOLO.

Sally Slade She's off the-

Chris Nichols Please.

Kat Harris You're the only person that I know who would respond to, "Congrats to getting married with YOLO".

Sally Slade YOLO. Absolutely sincere as well. If you look into her eyes, it's like, yeah, YOLO, YOLO marriage. Woo.

Chris Nichols It's not YOMO. You only marry once.

Sally Slade Yes.

Emily Van Belleghem Time will tell.

Chris Nichols Yes. Time will tell. That's great. But anyway, it was a really good... Back to your assistant. I'm very curious about this male assistant. I think it's worth

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a study to talk about, to see how many women talk to their virtual assistants cause there's plenty of them out now.

- Emily Van Belleghem And do you want to add? I wanted to note this earlier, but I couldn't remember. I remember there was a study that, I cannot remember which massive corporation did, but I want to say it was Apple with Siri. They made the voice female because it would be less scary. And they did...
- Chris Nichols Less intrusive.
- Emily Van Belleghem They made it a female voice because they wanted people to be less afraid of the tech and I thought that was controversial and was not a big fan of your hot take. Sally.
- Sally Slade Hot take. I recall a lunch with the three of us, or some quorum there of, in which it was discussed that in Hollywood, the AI that turns on humanity. It's always a woman.
- Kat Harris Yes, her in Her. She's a woman. In Ex Machina, It's a woman. In... I'm just trying to think of all the times that a robot has come back other than-
- Chris Nichols The Borg.
- Kat Harris Was Skynet a woman? Eventually.
- Chris Nichols The Borg in Star Trek was a woman.
- Kat Harris Yeah. I think Skynet in one of the Terminator movies was personified as a woman once.
- Emily Van Belleghem It's kind of strange. Well, or scary, unknown, foreign.
- Kat Harris The Terminator has always been male, but Skynet, the AI I think is a woman, or personified as one, in like Terminator 3, the one that no one talks about, but it's maybe still canon. I don't know anymore, if it's still canon or not.
- Chris Nichols Do you think that's because, okay. A beehive mentality. Queen bee scatters out the drones.
- Kat Harris Hmm. I don't know.
- Sally Slade I can't imagine. I don't know. Bees and technology, hand in hand? I don't know. It is kind of interesting though. It's contradictory in a way, that all this new tech coming out seems to be woman focused, like female personality, persona focused and yet.

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Chris Nichols In terms of the assistance.

Kat Harris Right.

Sally Slade Yeah, exactly. Or even with the rendered persona's online even.

Emily Van Belleghem Right. It's like fictitiously, historically the enemy and scary, but in, in roll outs for real life, soothing?

Sally Slade Question mark?

Emily Van Belleghem Women's voices. Grating, when you don't like what they say. Soothing, when they're helpful?

Kat Harris I was going to say when running for president. Soothing when helpful.

Emily Van Belleghem Maybe it's because when you can only hear a voice. You imagine a smile, you know? Cause if we smiled more it would be better.

Chris Nichols Historically speaking though, there has been a history of male assistance, right? A Butler, has been traditionally male, right? And they are soothing, generally speaking, as a voice or as a person that gives you advice on what you need for today. Maybe you should wear this tie today. You know what I mean?

Emily Van Belleghem But then there's like the nanny figure, right?

Sally Slade Like the head of house or something.

Emily Van Belleghem Yeah.

Kat Harris I forget her title.

Emily Van Belleghem I don't, I can't remember.

Sally Slade I was watching real Housewives of Atlanta.

Kat Harris I thought you were going to say Downton Abbey.

Sally Slade Yeah, I was going to say like a governess.

Emily Van Belleghem Governess. Is that right? I don't know. If, you are British then we apologize to all of England and their history. RIP. But yeah, that is very interesting how you mentioned like, yeah, Butler is traditionally-

Chris Nichols That's why there was Ask Jeeves. Ask Jeeves Was about a Butler.

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Kat Harris Exactly.

Emily Van Belleghem Yeah. I don't...

Kat Harris Sally just create Jeeves.

Sally Slade Oh my God.

Kat Harris Create virtual Jeeves.

Sally Slade That would be amazing.

Kat Harris Rendered Jeeves. But make him hot.

Sally Slade But we need a first name, like you know-

Kat Harris Ask.

Sally Slade We'd reboot him as-

Kat Harris John?

Sally Slade Jared.

Kat Harris Jared? Not Jared.

Sally Slade George?

Kat Harris George. Yes. Like Ginny but with a J but also not Ginny, like George.

Chris Nichols My son is obsessed with Frasier. He loves Frasier. I don't know if you guys watch Frasier.

Emily Van Belleghem I watched Cheers.

Chris Nichols He loves Cheers.

Emily Van Belleghem I loved Cheers.

Chris Nichols Okay. So Frasier is a spinoff of Cheers.

Kat Harris Oh, okay, I didn't know that.

Chris Nichols Went off for like 12 years, but there's an episode of Frasier where he basically, there's some old rich guy that died and he had a Butler. And then Frasier hired a Butler to have for the house. And it was this whole

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thing about living with a Butler in his house. The Butler was amazing at giving the best advice for different social events or whatever but would do this specific thing.

Emily Van Belleghem I want a Butler.

Chris Nichols Yes.

Sally Slade Yes, Alfred. Specifically.

Kat Harris Oh yeah. Alfred.

Chris Nichols It was really, kind of... Anyway, just looking at listening to that episode. It's like, "Oh yeah, that'd be great". If someone's like, "Today's going to be raining, sir. Maybe you should wear your rain shoes."

Emily Van Belleghem I like it as a suggestion. Maybe consider not getting soaked.

Chris Nichols Right?

Kat Harris Unless you want to get wet.

Sally Slade I have placed this umbrella strategically in front of you.

Chris Nichols There's a thing on your personal assistant, where it basically, you're supposed to say good morning to your personal assistant. It's like, okay, today is what you have on your schedule.

Emily Van Belleghem I had that set up for a hot, hot second and immediately got rid of it.

Chris Nichols Right, but what if it actually-

Kat Harris Worked?

Chris Nichols Sounded like a Butler giving you advice about the day?

Emily Van Belleghem Oh yeah.

Chris Nichols Telling you what to wear and-

Emily Van Belleghem There is something about the monotone voice. It was just droning through all of the facts. I had it going through-

Chris Nichols Yeah, but don't go through fact. Just make it conversational.

Emily Van Belleghem I know but, I was like, what's the weather? What's the time? What is the temperature and then what's the fact of the day? I wanted to know the

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fact of the day and then it started playing music and I was like, that's it. I can't take it anymore.

- Chris Nichols Especially when you just wake up.
- Sally Slade The other interesting thing about all of this too. Is that the most I ever used an audio interface was when I lived alone. I lived alone. I had a Kinect. I would always say, "Hey X-Box", because this was before Cortana really had her footing and I'd be like, "Hey X-Box, turn on". "Hey Xbox. Go to this". "Hey, check my messages". And when I did get Cortana, it was only when I was alone. When I would talk to her, it'd be like, "Hey Cortana, what's the time? What's the weather like?". And it was usually on my drive to work and thinking about it, I rarely use Alexa when my roommates are home. One, because audio interference, because my roommates are talking and when you say like, "Hey Alexa" and you have music playing or like you have other people talking. It's just a shit show and it doesn't know. It can't pick your voice out from a crowd and it's just like, "Hey Alexa, call Mom.", "You wanted to call Bob?", "No. Call Mom.", "You wanted to empty out your entire bank account?", "No! Call. Mom."
- Sally Slade Yeah. It's just annoying at that point and it's just like, oh right audio interfaces...
- Chris Nichols Google Assistant is actually pretty good at that. I've actually been able to talk to Google Assistant in a crowded restaurant and that's okay.
- Sally Slade I don't have Google Home or a Pixel, so I have not used it for a while.
- Emily Van Belleghem We now have both Alexa and Google Home at my place because we kept getting free things.
- Sally Slade Oh, nice.
- Emily Van Belleghem Because it was if you sign up for Spotify. I can't remember. Some sort of service.
- Sally Slade And you get a free thing.
- Emily Van Belleghem You got a free...
- Sally Slade I heard about this recently.
- Emily Van Belleghem You get a free Google Home. And then I already had an Alexa from like Black Friday, two Fridays ago, like less than two years ago or whatever. And it's funny to see the differences between the two because Alexa will accept some phrases and Google will accept some phrases, but those apparently are not, those are not mutually exclusive.

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- Chris Nichols Right?
- Emily Van Belleghem Or are they mutually-
- Sally Slade I don't think they are.
- Chris Nichols They don't always...
- Sally Slade They don't connect. So for the Google Home will have to say, "Hey Google, turn on the den lights" or something and then you get to Alexa and you're like, "Hey Alexa, please turn the den lights on". Like you can't, it was very strange. It couldn't pick up the phrases the same way and it took some serious adjusting, especially because my roommate has an Alexa and then I have an Alexa, they're both Echo Dots and we both have the phrase "lights on". So he'll say "lights on" and then my lights will turn on and Google will turn on and then his won't turn off. It's a lot of fun.
- Chris Nichols The funniest thing is when I go to, cause we have a Google Assistant in the living room, right? It's a small one but the speaker is still pretty loud and so everyone's gone to bed. My wife's gone to bed and everything and I'm watching a movie up late and I'm putting my headphones on and then I'm like, turn the lights off. And I was like, I want to just turn off. I was like, "Hey, Google. Turn off all the lights", and it was like, "Okay, turning off all the lights!"
- Sally Slade Yeah, I've had that before.
- Chris Nichols It was like ahh! And everyone wakes up in the house. I'm like, I'm sorry. Sorry. Sorry.
- Sally Slade Leave the room, google.
- Kat Harris Yeah, Google, I'm clearly whispering and you can hear nothing else, but silence.
- Sally Slade If I was on that project. I would have insisted because it is human nature that if someone was to whisper, then you whisper back.
- Chris Nichols Yes. See these are all things that a considerate Butler, who buttles correctly. Would buttle for you.

Why we need diverse teams

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Kat Harris Clearly their team size wasn't large enough to consider all the factors.

Sally Slade Perhaps if their team-

Kat Harris Was more diverse?

Sally Slade Had a more diverse background and wider range of experience in life. It would have occurred to one of them, that it is human nature to match volume.

Kat Harris Hmm. Interesting. It's like you just saw this elephant randomly sitting in the room, Sally. In our lightly...

Sally Slade Empathy? Question mark.

Emily Van Belleghem A buzz word, dismissed.

Kat Harris Lightly referencing it. Yeah.

Chris Nichols That's, yeah. I think it's a great project. Sorry. See, we've already gone off, on a big long tangent about your project. That's amazing.

Sally Slade Yeah. Thank you.

Kat Harris Yeah.

Sally Slade I feel that Butler's have a place in our virtual future.

Kat Harris I see. Yes. I would hope so.

Emily Van Belleghem Supportive.

Kat Harris Yes. I would love to be supported by a virtual, autonomous But... thing that buttlles.

Sally Slade Now here's a good drinking game.

Kat Harris As we are drinking.

Sally Slade Name a time.

Kat Harris Oh no.

Sally Slade Failure.

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Kat Harris 5:00 PM.

Sally Slade To have a diverse enough team or a team with enough empathy, has failed technology.

Kat Harris Yeah. Do we have all night? Or?

Chris Nichols I know we are going to go long on this podcast by the way.

Kat Harris Previously at the-

Chris Nichols We're already at an hour and a half.

Kat Harris Oh wow. I'll rapid fire. Yeah. No it was all me.

Chris Nichols No pressure. You guys can talk as long as you want.

Kat Harris Yeah, no. The one that comes to mind was the Xbox controller. The bare controller. As someone who did not work at Microsoft at that time but definitely used Microsoft products. I am a small human. My hand size for gloves is like extra small and I could not use that controller in any way, shape or form. Like a medium sized male, quote unquote, in our American society could also not use that controller. And it was a detriment to everyone and I think they ended up shipping a new controller because of it and it was like cool, you just wasted months and months of research, months and months of development, months and months of like factory time and blah blah blah and specs to build this controller that everyone universally hated.

Kat Harris And probably because all the people you were testing on were really large men with really large hands.

Emily Van Belleghem And if I may also throw in, phones into the mix.

Kat Harris Yes.

Emily Van Belleghem Once you have a, what is it? PopSockets. Multimillion dollars. Now at this point, once you have a multimillion dollar company making a affordance, just so half of your, what's the word? User base. Can just hold-

Sally Slade Your cell phone?

Kat Harris Without dropping it?

Chris Nichols Hold the phone.

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Emily Van Belleghem That is a warning sign.

Kat Harris Looking at the back of my phone, which is shattered because I dropped it. Because, I was trying to swipe on it.

Emily Van Belleghem Just use it.

Kat Harris With one hand.

Emily Van Belleghem Like a person. How dare you.

Kat Harris Yeah, I know.

Sally Slade Women are people?

Kat Harris No, of course not, my bad. Yeah. So, that just, hand size is one. Color. Let's use the soap dispenser model. When a person with, not a lot of melanin, uses it, it works 100% of the time and then a person with a lot of melanin uses it and it does not register that there is a hand.

Emily Van Belleghem A concern.

Sally Slade Coming from film.

Chris Nichols Wait a minute. Soap dispensers?

Kat Harris Oh, have you not heard that one?

Chris Nichols I did not know that. It does not recognize skin color.

Kat Harris Yes there are several... Correct. So there's several GIF's of people trying to use the soap dispenser and I believe in this specific GIF that I am referencing, the person was African American and they're just like, 100 times. And then they use a paper towel, like one of the white cheap towels and they put it and it instantly works. Every time, every time.

Chris Nichols Oh my God.

Kat Harris And it was disheartening to say the least that wow. You clearly didn't have.

Chris Nichols That's like flesh colored Band-aids.

Sally Slade Oh, nude stockings.

Kat Harris How they're all a little too late for me. Huh?

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Emily Van Belleghem No kidding. I remember when I was in high school, I had an English teacher and she said, I will give you extra credit if you can find Band-aids that are your skin tone. And I was like, watch me. And it took me like six months. It was awful. And then I was like, you've made your point.

Chris Nichols Right.

Sally Slade Well I can tell you a film anecdote.

Kat Harris Yes, Sally.

Sally Slade As someone who has oft managed a color science pipeline. You are calibrating your entire projects, color space, to a single image of a white, blonde woman called Marcie.

Chris Nichols Marcie. Yeah.

Sally Slade In fact, you can join Marcie's cult following on Facebook.

Kat Harris Ooh.

Sally Slade If you Google like Marcie Kodak or something. I don't...

Chris Nichols I have another one for you. Cameras that are trying to be smart.

Kat Harris Oh no.

Chris Nichols And they're trying to tell you if you take a bad picture maybe you should retake it.

Sally Slade I see where this is going.

Kat Harris Oh no.

Chris Nichols And so it was taking a picture. And it said, did someone blink and it turns out it was a bunch of Asian people that were in the picture.

Sally Slade It's also falls into, when I was at MIT, I made a poster. I very briefly got to talk to a nice woman named Joy. I might butcher Joy's last name a little bit.

Chris Nichols Okay.

Sally Slade Joy Buolamwini I think. Something like that. I'm sorry, Joy. She is working on facial recognition software that encompasses all skin types and races and she specifically is African American and she found that some facial

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recognition software just wouldn't even recognize that she was there. And so she's done a lot of work on this and she was on some very incredible articles and lists, past couple of years. But I think it's very, very important, especially with new tech-

- Chris Nichols I've also heard some of the new facial recognition software that's being used by FBI or the TSA, or whatever is going on, on that side, tends to lump everyone that is of a certain skin tone as positive and that can distinguish between non African American people much easier.
- Kat Harris Yeah. See the funny, not the funny thing is, but the ironic thing is that you can really tell what a team's makeup is based on the problems they eventually run into. So for instance the soap dispenser, the paper towel dispenser example. When a lot of people were like, "Oh, well we're a very small company. We don't have enough money to do a lot of user research and market research. And so we can't do a lot of user testing of diverse people because we just don't have the money to do it." And that's true for a lot of companies. But at the same time, as a software developer, I test everything myself. And as a brown, small handed woman. I'm going to be testing for brown, small handed women because that is my base. I'm me. I can test things very quickly and easily.
- Kat Harris And if it doesn't work for me and my height and my hand size and my skin tone. I'm not going to say, "Hey guys, we can't ship this product." I'm going to say, "Oh, there's a bug. I am going to fix it."
- Chris Nichols Right.
- Kat Harris And That's the funny thing cause you know that the people who made that paper towel dispenser didn't have a single black person on their staff, that was developing the project, that could have easily tested it and filed the bug and said, "Hey guys, it doesn't work when I use it. That's a big bug. Can't ship" The end.
- Emily Van Belleghem Yeah, it's true.
- Kat Harris Let's fix it.
- Emily Van Belleghem I think it's kind of like... The more diverse your team is, the more of an opportunity you have to account for everybody and make sure that your product is, what's the word? I don't even want to say like accessible.
- Kat Harris Robust.
- Emily Van Belleghem Yeah, robust is good. It's just the concept of, well why wouldn't you want to be able to work for more users and be able to affect more people?

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- Chris Nichols Right.
- Emily Van Belleghem How nice would that be?
- Kat Harris It's also for the people out there who are like, well, it works for our user base. We don't have to change. And we make enough money. And I was like, well, would you like to make even more money? And they were like, "Well, only 5% of the people who play our game are women." And I was like, "Imagine if that was even larger. Imagine how much more money you could make if you just-"
- Chris Nichols Why would I do it for that because-
- Emily Van Belleghem "What if your game was so awesome and inclusive, that even more than 5% ... like it just grew, all of a sudden, 15." Oh my God.
- Kat Harris Yeah. It's just funny because a lot of people are like, "Well, the monetary considerations of the extra testing and the extra engineering ..."
- Chris Nichols That's BS because they're looking at their existing market as opposed to their potential markets.
- Kat Harris Exactly.
- Emily Van Belleghem Yeah.
- Kat Harris It's a poor business decision and I'd like to-.
- Emily Van Belleghem Nearsighted.
- Kat Harris Yeah. It's just like, cool, there is a ... For all the people who say things like, "Oh, it doesn't work for our market," and I'm like, "You can grow your market. That's... You can make more money."
- Kat Harris Unfortunately, we live in America, which is a very capitalistic society, and if you don't frame things in terms of money, a lot of the time the people in power don't care. And so I'm just... I've gotten used to having to frame a lot of just basics, of considering other humans that could be ... that should be considered as you know, people, as a market share base.
- Emily Van Belleghem Yeah. Would you like for more money?
- Kat Harris Would you like more money?
- Emily Van Belleghem Would you like more money?

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Kat Harris Exactly. Would you like a larger target market?

Chris Nichols Yeah. Well, it's-

Kat Harris And that's a reflection of the society we live in and unfortunately like the people who are currently in power and like, how it's quote unquote traditionally been.

Chris Nichols Do you think it's malicious or is it just lazy?

Kat Harris No, definitely not malicious. I just think it's just, it's just, they don't...

Chris Nichols Even consider it?

Kat Harris They don't even think it is.

Sally Slade It is like Grace Hopper once said, a famed computer scientist, individual who created compilers and helped co-write COBOL. No big deal.

Emily Van Belleghem Yeah. Also coined the word 'bug'.

Sally Slade Yeah. Whatever.

Chris Nichols Which was a bug in an actual drawer.

Emily Van Belleghem Yeah, it was a moth.

Chris Nichols Yeah it was a moth.

Sally Slade She once said, like the most dangerous phrase is, "we've always done it this way."

Emily Van Belleghem Yes. One of my favorite quotes by her.

Sally Slade I butchered it. Likely.

Chris Nichols Is that really what she said?

Kat Harris That's pretty close.

Sally Slade Yeah. Approximately.

Chris Nichols Yeah. The worst.

Emily Van Belleghem One of the most dangerous phrases.

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Kat Harris We've always done it this way. Why would we change it? And it's like, Oh, if it's, if it's not broke, don't fix it. And I'm like-

Emily Van Belleghem But it is broke.

Kat Harris It is broke. And then you just, you just don't see that it's broken because you've made it for only yourself and people who are exactly like you. If you take the time to maybe have people who are making it be different, if every person is making it for themselves, if you have a very diverse team, you're already hitting a lot more market share.

Chris Nichols Right!

Kat Harris Because if every developer is making it for themselves, I a short Latino woman is making it for short Latina women, Chris, you're making it for, for tall white men, Sally making it for amazing, beautiful, star, unicorn, humans in the world that are perfect in every way, shape and form.

Sally Slade Thank you.

Kat Harris Sorry.

Emily Van Belleghem Hard to follow that one.

Kat Harris And Emily!

Emily Van Belleghem And Emily's, just a mutt in the corner. Thanks Kat!

Kat Harris Is it half Japanese, half, half Indian?

Emily Van Belleghem It's Pacific Islander actually.

Kat Harris Pacific Islander slash Indian woman as well. Who is of medium height. That's already so much more market share than just-

Emily Van Belleghem With perfect pitch.

Kat Harris I mean, amazing pitch, if she would sing for us.

Emily Van Belleghem No.

Kat Harris Dang. All right,

Chris Nichols These are very good dynamic reference. Very good.

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Kat Harris Yeah, if you would want... Anyway with perfect pitch and amazing vocals, you're already hitting such a more diverse market than, you know, straight white guys just saying.

Sally Slade I would err on the side of saying majority consumer population of existing tech product.

Kat Harris Yes. That.

Sally Slade In America.

Kat Harris Or the majority consisting builders of tech products because that is... If they're all building for themselves-

Sally Slade Even more fair.

Kat Harris Yeah. That is what they are building for. Just because they, again, it's not anyone's fault. It is just a product of... If I'm building stuff for me, I'm going to test for myself first.

Chris Nichols So the reason I brought up laziness, it was a joke as my friend Graham was a developer, very, very smart guy. He used to have a joke and he had a sticker on the side of his computer. That's, that was a big thumbs up and it says, "works on my machine".

Kat Harris Ah, yeah.

Chris Nichols And so that was the joke is like... Yeah, it's like, well that's not where it ends. Just because-

Emily Van Belleghem Honey, if it's not in the bill. I don't care.

Kat Harris That Jenkins was not building... Jenkins?

Emily Van Belleghem Jenkins?

Kat Harris Jenkins?

Emily Van Belleghem Jenkins!

Kat Harris There we go! A male-

Sally Slade Isn't that a surname? Jenkins?

Emily Van Belleghem I don't know

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Kat Harris I thought it was his first name.

Chris Nichols By the end of this podcast, we will be nailing his persona.

Kat Harris She is the male Butler.

Sally Slade There is Leroy Jenkins from internet memes.

Kat Harris Yes.

Sally Slade There is Daniel Jenkins of VFX artists in Vancouver. You're the only Jenkins I know.

Kat Harris I hope you're listening. Shout out.

Sally Slade Happy birth of your first son. You're welcome for introducing you to your wife at Frisbee.

Kat Harris Wow. Sally, taking credit for so many things.

Sally Slade I mean, someone's got to.

Kat Harris But yeah, that's just like a fun little thing that we have to think about.

Sally Slade I don't know a first name Jenkins.

Kat Harris I don't either, other than the Jenkins that we use to build all of the stuff. And that's, that's another quote you bring up. I thought you were going to say this when you mentioned your friend's license plate or sticker?

Chris Nichols Sticker.

Kat Harris Bumper sticker. The best developers are lazy developers. They don't want to remake the wheel. "Oh, we're so good is because we don't, we find ways to not like reinvent the wheel every time."

Sally Slade Work smart. Not hard.

Kat Harris Exactly. Yeah.

Emily Van Belleghem And I am a proponent for that, but I think there's a difference between lazy and inconsiderate, as you were saying before.

Kat Harris Right. And that's the thing is that a lot of people have been conflating the two of like, "Oh well I've considered me and it works on my machine and I'm not going to reinvent the wheel and oh we've always done it this way,

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so why would I take the extra effort to change it?" And so it was just kind of like, Oh... It is a very culturally normative thing where developers pride themselves on being, quote unquote, lazy, when it's like maybe we should change that and make more of an effort to go outside... But like, don't confuse laziness with inconsiderateness and kind of separate the two again, because I think they've just been pushed into one.

Emily Van Belleghem I think it's kind of like along the lines... we want to find the quickest path but that includes as many as we can.

Kat Harris Yeah.

Sally Slade It's a very interesting conversation. I feel like this is very applicable to these monolithic tech companies and these things that influence so many people's lives at the same time. But different kind of point of view. I have a friend, she runs a comic book company. She's an editor, a co-founder and it is a comic book company dedicated to a very specific audience. So they write about magical girls.

Emily Van Belleghem Yes.

Sally Slade Cute men in love.

Kat Harris Yes.

Sally Slade And, and her mission statement for her company is along the lines of, "we write what we know, we write what we love to read about and if everyone did this and everyone had the same platform, then together we comprise one wholly diverse comic book shop." And it's kind of like this idea that her and her crew, they don't care for the mass market. They, they care for their niche. And I wonder if software will ever get to a point where it's so open to so many developers that you can be lazy, and you can not be so generous with your inclusion, and you can just write what you know and, and explore fields you're passionate about. I wonder.

Emily Van Belleghem It is a good-

Chris Nichols What if you think about it like the movie industry? Right? The movie industry is so obsessed with the four quadrants, right? Yeah.

Emily Van Belleghem And especially now with like the whole streaming wars thing. Oh man.

Chris Nichols Right, because streaming is actually becoming more niche.

Emily Van Belleghem Yeah, and you specifically have to have so many resources in order to break into movies and TV shows now.

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Chris Nichols Right? So what if you're like, "Oh, I'll make technology that works specifically for black women." Let's just put it that way, right? What if I made technology specific,.. well there is technology, a lot of technology for black women specifically, but...

Emily Van Belleghem Afro-futurism.

Chris Nichols Yeah, I mean there is. I mean that's fine. That's great. You know, but that's the thing, right? Niche stuff.

Sally Slade What are the four quadrants?

Chris Nichols Over 25, under 25, male, female.

Sally Slade Oh, a graph?

Chris Nichols Yes.

Emily Van Belleghem A chart.

Sally Slade Which one is two Pi?

Kat Harris The answer is zero.

Chris Nichols So, basically like, if you look at the latest Avenger films, they cost \$400 million to make. And that means they need to make \$1 billion to break even.

Kat Harris Yep.

Chris Nichols So that means that they know the only way they're going to do that is to make sure that they appeal to the four quadrants. So that's what you get. You get an average film.

Kat Harris Yeah. And I would like to say for those films, instead of "yes, and" for improv it's "yes, but". Yes, but... It's been like... They keep making movies where it breaks from that norm and they make so much money. Black Panther is like the star child of the Marvel universe of, "Hey, let's not do the thing we've consistently done and change it up and make a film for-

Chris Nichols Like Deadpool.

Kat Harris Yeah, or Deadpool.

Emily Van Belleghem Wonder Woman.

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Kat Harris Yeah Wonder Woman, Captain Marvel. And it's like, "let's put a woman as the star character. Let's put a black man as the star character and have a majority of the cast just be black actors." And it's what? Top five grossing movies ever? Top 10 grossing movies worldwide? And it's-

Chris Nichols Absolutely but the risk factor was much higher. So the budgets were smaller, right?

Kat Harris For captain... For Black Panther?

Chris Nichols Black Panther's budget was smaller than End Game.

Kat Harris Well, End Game. It was that chaos of high profile actors. So I want to say like, that budget alone is surely half the budget.

Emily Van Belleghem Plus the Sharma budget.

Kat Harris The Shawarma!

Chris Nichols But if you're making billions of dollars in profit, you can say, "let's see how Black Panther does. Right? And that's, that's fine. And that is good. You're right. And it's a good "yes, but."

Kat Harris Yes, but get out. Yes, but us. Yes, but.

Chris Nichols Yes, but get out? Those are teeny budgets. Right, right.

Kat Harris And I'm just saying, okay, they have teeny budgets, but they're making on par with, close to End Game.

Chris Nichols Oh yeah.

Kat Harris So that profit margin is so big.

Chris Nichols Very different model though. That's Bloom House versus Marvel. Right. So-

Kat Harris But... And it's interesting because you have the Crazy Rich Asians. It's another one where they're like, "we didn't see this coming!" Yet, if you asked any Asian person, they would have been like, "yes, I will watch this movie like 10 times in the theaters." Because it was so funny and amazing and it was so universally liked, not just by Asian people but by white people. Latinas.

Sally Slade Great, rom-com.

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Kat Harris Great rom-com, it's hot.

Emily Van Belleghem It's also culturally on point. I saw so much of my family like in that movie. It spoke to me.

Sally Slade It's also spring-boarded that a male actor, as a male, viable, love interest, which a complaint I often hear from my Asian male friends is "I don't see myself represented in Hollywood as a sex symbol."

Kat Harris Yep. Into the Badlands was like-

Chris Nichols Except for John Woo films.

Kat Harris Well.

Emily Van Belleghem Face/Off?

Kat Harris No, not Face/Off. Like a hard boiled... what's his name?

Emily Van Belleghem Oh my film game's quite weak.

Kat Harris Yeah see, if the weak film game people can't mention one, then it's not strong enough.

Emily Van Belleghem There we go, well put.

Kat Harris And that's the thing. It's like if I, who am I-

Chris Nichols Okay, what about Jackie Chang? Jackie Chang was-

Emily Van Belleghem No. No.

Kat Harris It wasn't really a love interest. He was always the side funding guy.

Sally Slade He's the funny neighbor. Literally.

Emily Van Belleghem Chang or Chan?

Kat Harris Jackie Chan.

Emily Van Belleghem It's Chan, right?

Kat Harris Yeah.

Emily Van Belleghem Okay.

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Chris Nichols Yeah.

Emily Van Belleghem Okay. I was like, "is there another one?"

Kat Harris No, no.

Chris Nichols Did I say Chang? I said Chan.

Emily Van Belleghem I don't know.

Sally Slade Roll the tapes.

Kat Harris I can't. Oh man. Now I'm like, I'm missing the actor's name. Crazy Rich Asians, main lead.

Emily Van Belleghem The man?

Kat Harris Yes.

Emily Van Belleghem I don't know his name.

Kat Harris He's in Christmas Story with Daenerys Targaryen and I can't remember her name either, but Daenerys Targaryen and Crazy Rich Asians are in a Christmas Story, or like a new Christmas movie together. And I was like, "I don't think I've ever seen that." And I'm thinking, and I can name three, only three, male love interests who are Asian. One is from a Crazy Ex-Girlfriend, the other is from Crazy Rich Asians. Holla crazy. And then Into The Badlands.

Emily Van Belleghem No, but Jason.

Kat Harris But Jason Bourne?

Emily Van Belleghem From the TV show.

Kat Harris Crazy ex girlfriend?

Emily Van Belleghem No. Good.

Kat Harris Oh, The Good Place.

Emily Van Belleghem Good place. Love him. I don't know his actor name.

Sally Slade Harold and Kumar actor.

Chris Nichols Who has also done some really cool stuff.

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Emily Van Belleghem Fresh off the boat!

Chris Nichols And he was also on the Obama Administration.

Sally Slade here is an incredible TV series if you're into rom-coms.

Kat Harris Yes, always.

Sally Slade And formulaic bullshit, called Selfie about-

Emily Van Belleghem I hate it.

Sally Slade No you love it.

Kat Harris We love it.

Chris Nichols Oh, Chow Yun-fat was the guy I was thinking about. From the films.

Sally Slade We can count it all on one to two hands. It's a problem.

Kat Harris Meanwhile, name a white male actor who is a love interest. Go.

Sally Slade There's like 16 called Chris.

Kat Harris Yeah, exactly. Chris! All of them!

Sally Slade And I love that Charlie's Angels, which I haven't seen yet. Reboot.

Kat Harris I loved it. I don't know why it didn't do well at the box office. It was so funny.

Sally Slade I read a medium piece about how the Twilight actress, Kristen Stewart-

Kat Harris Kristen Stewart-

Sally Slade Should be included in the Hollywood Chris's of blonde Chris's, we want to serve us breakfast.

Kat Harris God, yes. All the time.

Emily Van Belleghem I didn't know there was such a list.

Sally Slade Yes, it's like Chris Hemsworth. Chris?

Kat Harris Evans.

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Sally Slade Evans.

Kat Harris Chris Pratt.

Sally Slade There we go.

Emily Van Belleghem Man, I'll never get to be on this list.

Kat Harris It's something, well yeah you're... Chris?

Chris Nichols No.

Kat Harris So many Chris's. But yeah, that movie was great. I don't know why people were like, "Oh it wasn't as good as the originals, we miss the originals, so much. Blah-dee-blah." And I'm like, yo, I went in with like zero expectation. But also it was just a fun movie. It was fun. I liked it. And again, that was the movie that I pointed out that was like, "we're going to hack into the blockchain." And I was like, "this makes no fucking sense. But I love it and it's so funny."

Emily Van Belleghem If I have to hear that phrase again.

Kat Harris Hack into the blockchain?

Sally Slade How was Rhianna's hacking in Oceans?

Kat Harris Very typical hacking. And I'm like, "they did do something with a magnet." Where it's like a key magnet, and they had to do like this super high powered magnet to unlock something. Which I was like "That's accurate."

Emily Van Belleghem Footprint? I've heard that phrase or term before.

Sally Slade Carbon footprint?

Emily Van Belleghem No. Like it's-

Sally Slade "I can hack back into it and find where they are cause they left a footprint" And I'm like "no, that's not how that works."

Emily Van Belleghem Yeah it's like how much space you take up and how smart you are.

Sally Slade Like you forgot to purge the tempter.

Kat Harris Yeah. You forgot to erase what you've done and so there's code left.

Epic mansplaining

- Sally Slade In the very beginning of this episode, Chris mentioned mansplaining and I don't want to get too specific, but someone took it upon themselves to explain to me what a tempter was and they wrote it out on a whiteboard in front of me and anyone in earshot, /root /tmp. And I just thought "damn."
- Emily Van Belleghem Recently?
- Kat Harris What?
- Sally Slade Yeah, it's still up there.
- Emily Van Belleghem Who has that kind of-
- Kat Harris Time?
- Emily Van Belleghem Bravery.
- Kat Harris Just time in general. You could also, Google is a thing. It's just man-
- Sally Slade Mansplaining aside. I don't know. Was it age? Was it gender? Was it someone just wanted to write on a whiteboard? I don't know. But like this is... It sucked!
- Kat Harris Your hate of whiteboards is showing Sally. Okay, calm down.
- Sally Slade I feel like anytime someone draws something on a whiteboard, it's because they don't have the command of language to explain it to you, so maybe they shouldn't be explaining it to you.
- Kat Harris Hey, I, speaking from someone who is not very good at the English language, likes having a visual diagram for explaining myself because words are hard for me. The end.
- Sally Slade Okay, well you're excused. Here's your hall pass.
- Kat Harris Thank you. But yeah, no, I... That mansplaining thing, I'd love to see it on the whiteboard. If we get back to work tomorrow and it's still-
- Sally Slade If we get back?
- Kat Harris No, if we get back to work and it's still there.

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- Sally Slade Just take a standoff with my producer, enter the clean room and observe the whiteboard that says root TMP and then weep.
- Kat Harris Or laugh hysterically.
- Sally Slade For my pride, which was challenged by someone who felt like they had to write slash temp.
- Kat Harris And did anyone within earshot, because you said it was within earshot, turn around and be like, "why are you explaining that? Of course Sally knows what the fuck that is because she is an amazing developer and also you're explaining like rudimentary concepts to a pro-dev in a very condescending way."
- Sally Slade It's hard to not feel that your professionalism is challenged, if someone, draws a 30-60-90 triangle on a whiteboard and-
- Chris Nichols Tries to explain to you that all equals to 180 degrees.
- Kat Harris Yeah. Huh. And again, I'm just like, "how come no one within earshot?" And so we were talking about this earlier today. Is it our insecurity that they're explaining it to us because we are a woman, or younger, or a minority, that the person feels like they need to explain it in a way that's so condescending and rude? Or is it because they're just a rude and condescending person? They would have done it to anybody.
- Sally Slade Yes. That is the eternal question.
- Kat Harris That is something that we have to ask ourselves that I feel like a lot of developers who are in a majority represented, don't have to ask. Like if someone were to explain something to you in a really rude and condescending way, a lot of my male counterparts would never think that it was because they were being explained to you, because they are a white male.
- Sally Slade Or because they're lesser in any way.
- Kat Harris Or because they're lesser in any way. They would think, "Oh no, that person's an asshole that doesn't know what they're talking about."
- Emily Van Belleghem It's also interesting when I think... For me, the way I usually handle situations like this is I'm just like so brutally upfront and then later realize, "Oh, maybe I shouldn't have been so upfront." Like if someone tries to explain a 30-60-90 triangle to me, I'll just look them in the eye and go, "that's offensive to me." And then they'll usually sweat a little bit and they'll leave. But then I'm like, "Oh, I probably should have been a little bit

CHAOSGROUP

nicer on him" but at the same time, come on man, give me the respect I deserve.

Kat Harris Or just like-

Sally Slade Just ask them to draw 90-90-90 triangle for you.

Emily Van Belleghem I'm sorry I just don't get it.

Chris Nichols That's possible actually. That's possible.

Sally Slade Oh?

Chris Nichols Yeah. Just, if you're on the planet earth and you're at the North pole, just go straight down to the equator, turn 90 degrees, go a quarter way around the earth for 90 degrees. Go back up, go back to the equator and you got 90 degrees, 90 degrees, 90 degrees.

Sally Slade That sounds very reasonable.

Emily Van Belleghem But isn't that in-

Chris Nichols Curved space?

Emily Van Belleghem Yeah. I was going to say. Is it really a triangle?

Chris Nichols It's a triangle technically.

Sally Slade It does have three points.

Chris Nichols I was a math major and I loved geometry, so I'm sorry. Was that me mathsplaining curved space?

Kat Harris No, that's us asking what you meant and you clarifying what you meant.

Chris Nichols Okay, good. Because I feel bad.

Kat Harris Because we were literally like, "what do you mean Chris?" We were all giving you like the, "huh?"

Emily Van Belleghem I didn't look you in the eye and say it was offensive, so you're okay.

Kat Harris But I just want to point out, because Sally was on my other podcast; Martini Giant and I was sitting here and witnessed my good friend, and who has apologized and we've mocked him for it, mansplaining to her VR.

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- Kat Harris Oh my God, yes. I wish I could have been there for that. Like in person, to see the shame.
- Chris Nichols He was like telling her what all the advantages and disadvantages of VR. It's like, "do you realize who the fuck you're talking to? You're talking to Sally Slade." And I was like, "what the fuck are you doing?"
- Sally Slade Especially when you've been in the space for so many years.
- Chris Nichols I know and he's put on a headset maybe three times.
- Sally Slade Yeah, to be fair.
- Kat Harris To be fair.
- Emily Van Belleghem To be fair.
- Sally Slade To be fair, some people tend to get carried away when there is a microphone or a venue with which to express yourself. There is an impetus to hear yourself speak and though I don't care to be on the receiving end necessarily of such a monologue that is redundant to my education. It... they need the training, they need to make that mistake and then be like, "Oh maybe I should pin that monologue and rather pick a different one." Because someone else could elucidate in a much more experienced set of terms.
- Emily Van Belleghem And it's kind of one of those things where sometimes you see it happening and you're just like, "I'm just going to let it-
- Kat Harris Let it happen.
- Emily Van Belleghem "Just going let this happen and see if they learn."
- Chris Nichols I will say another thing and I'm going to make excuses for Dan here. Sometimes-
- Sally Slade Not Dan from MIT. We love you Dan.
- Chris Nichols Sometimes you tend to explain things because you're nervous.
- Kat Harris Yes and that is... That was the other thing that I was going to say. A lot of people who are, like Sally was saying, just learned about a thing, or excited about a thing, or are nervous about being in front of a microphone, or just in general, wanting to seem smarter than they are, will just start telling the story of X thing that they are not very knowledgeable about. And to the people in the room who are very knowledgeable about it will

CHAOSGROUP

go, "you don't know what you're talking about". But to people who don't know and who are very... who are new to the subject matter will think, "wow, this person knows so much about it." When every other word is bullshit because they don't actually know what they're talking about.

- Emily Van Belleghem They've never hacked the blockchain?
- Kat Harris Yeah, they've never hacked the blockchain. They never want to hack the receipt of Trip. Like I just... that movie, it was so good except for that one part. I'm so sad.
- Chris Nichols I'm sorry.
- Kat Harris Elizabeth Banks. Next time, hey girl. If you ever want to make a tech movie, I'll work for free. Just Twitter me, tweet me.
- Sally Slade Your work has value Kat.
- Kat Harris But like, if I just get to meet you and be invited to the premiere and get to sit next to Kristen Stewart, that'd be enough.
- Sally Slade One of the Chris's of Hollywood.
- Chris Nichols We will make this happen.
- Kat Harris Oh my gosh. My heart is beating so fast.
- Chris Nichols I'm going to see what we can do.
- Kat Harris Oh my gosh.
- Sally Slade There we go.
- Kat Harris I'm blushing so hard.
- Chris Nichols Trust me, I'm a white male, I can do this.
- Kat Harris That was perfect. That was perfect. That was great. Yes. But yeah, it's like-
- Chris Nichols No, I think this is a wonderful idea. I think that people need to know the correct things.
- Kat Harris Oh, well then the other thing that I was going to say with it was, just know who you're talking to. Take the time to ask who you're talking to and be like, hey... In meetings, one of our new leads that joined the team, she's new. But also I think she just does this as a habit of her personality is like,

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"Hey, what do you like to work on? What is your knowledge set? How do you do the thing that you do so that when I'm talking to you, I'm not telling you information that you already know."

Chris Nichols

Right.

Kat Harris

So she always asks like, "Hey, where are you in this progress? Tell me everything that you know so I don't have to re-explain it to you."

Sally Slade

That's so optimized.

Kat Harris

I mean it is, it's great. And I'm like, "ah, I wish all meetings could go like this." Because then she goes, "Hey, who doesn't know the thing right now?" And people just like raise their hand. And she's just like, "okay, so I'm just going to go over this real quick since it's only one person. This is blah, blah, blah." And if it's more than like three people, she's like, "okay, I'll go into this more in depth." And it's just like, if you take the time to understand who's on your team, or who is just the person that you're interacting with. If Dan, who was thrown under the bus earlier, had maybe asked Sally, "Hey Sally, what do you do?" Or "who do you work for and what do they do?" He might've realized very quickly that VR was a thing.

Sally Slade

He just knits these very beautiful soliloquies of tapestry, and it is satisfying to hear them to completion.

Kat Harris

Yes. But before the microphones are rolling. When you guys were grabbing probably a drink for the elephant? What was it?

Chris Nichols

Martini Giant.

Kat Harris

Martini Giant.

Emily Van Belleghem What?

Kat Harris

So the podcast is Martini Giant and they always make a drink for it. And so like while they were making the drink before the podcast started.

Chris Nichols

Oh, he knows who Sally is.

Kat Harris

Right, but then-

Chris Nichols

But I think he was nervous because, well first of all, Dan likes to just go off and talk. Right? And so he made his point, but he didn't realize... He was making his point without realizing Sally's right here in the room. Right? So he's making a point about VR that he wants to talk about. And it's like, but why are you talking about it when Sally should clearly be talking about it? So, that was really what it came down to.

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Kat Harris I see.

Chris Nichols You know what I mean? And I'm not necessarily... And listen, he has repented this ad nauseum and we make fun of him.

Kat Harris Good job.

Chris Nichols And he's a great person. Dan Tarn is a really good person.

Sally Slade Well, you know this comes up a lot. I feel like I will begrudge a scenario and I will say "I did not enjoy... Not that scenario, for the record. And I will say "I did not enjoy the conversation. I removed myself from the premise." And people will say, "why didn't you change the conversation? Like, why didn't you, Oh, do something?"

Emily Van Belleghem Oh my God.

Kat Harris Yeah. And your answer?

Sally Slade I mean, it depends on the room and the conversation, but my answer is typically, I felt like... It could be a number of things, but maybe you just don't have the energy that day, maybe. You think that your few statements in the room won't change the pattern and it's just a drop in the bucket and you move on. Maybe you feel-

Chris Nichols Maybe got real work to do.

Sally Slade Maybe you've got real work to do. Maybe you feel your silence is a stronger statement, maybe... Which others would view as counterproductive. There's a number of reasons, but like this is a common theme of, if you didn't like it, why didn't you change it? And I feel like this is something that like falls upon-

Emily Van Belleghem That's like so victim blaming. I don't, as someone who has been told she's confrontational, I have to say I would never blame someone for not changing the conversation when they're uncomfortable cause that's just not... It's like saying, "Oh well, it's your responsibility to make up for someone's lack of consideration." The consideration should have been there in the first place.

Kat Harris I know. And it sucks. It just sucks. Cause again, like Sally was saying, I'm tired. I don't want to have to represent Latina queer women every goddamn day, I get tired sometimes. Please just Google it yourself and a lot of-

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- Sally Slade Honestly sometimes like I've seen like, Oh, just pass that person on over to someone else. Right? EVB will handle it.
- Kat Harris There's some great allies out there and a great ally is a person who will take it upon themselves to do research and maybe double check with a person in a minority group to be like, "Hey, I did some research. This is the message that I feel like you are trying to talk about or represent and I want to make sure that when I'm correcting my fellow majority people that this is a reality that you are facing." And it's like, great. Yes, thank you. That is a true thing that I have to deal with every day. If you could take it upon yourself to talk with your peers who may actually listen to you more than they will listen to someone in the minority because historically humans will trust people who are like them more than they will trust someone who is different than them. And so if someone who is like them is telling them, "No, this person who is different, who is saying these things, those things are actually true." What a crazy world we live in.
- Emily Van Belleghem As sad as it is-
- Kat Harris They will believe it more.
- Emily Van Belleghem This is so pertinent in structure for like your team. Even any engineering team. I remember when I was trying to find... I was on a project or something, I can't remember, but I had my team lead, who was a guy, go and introduce me to all the other engineers and he was like, "Hey, this is EVB. She knows some things so you know, respect her." And that made such a big difference because it wasn't me having to defend myself before unknowingly not knowing if there was going to be some sort of weird offensive thing that was going to happen. But it was just the concept of if you let outside, foreign, whatever in, then it's safer for everyone and you just get more work done. There's no longer the questioning of someone's place on a team. It's more like, okay, well this is what you know, this is what I know. Let's go.
- Kat Harris As an engineer, one might say it's more efficient to cut through the whole, "I do not know or don't know what this engineer can handle. So I'm going to question everything that they say," but rather just ask, "Hey, do you think you can handle this? What is your like experience with this, what do you enjoy doing? What would you like to learn?" And it's like, "Oh, I'm very good at X, Y, and Z and I'd love to learn A, B, and C. so my skills are not great in A, B, and C, but I would love work, I would love A, B, and C work, but just know that it will take a little bit more time and I will put in the hours and I will learn. And if I have like someone to pair program with, I'll learn even faster and then I'll be able to do A, B and C as well as X, Y, and Z. All the letters, the whole alphabet at that point."

CHAOSGROUP

- Kat Harris I feel like it's just an efficiency thing and being a kind human to other humans. Just be considerate of other humans. Be efficient with how you disperse knowledge and get knowledge from other people and be like, Hey.
- Sally Slade I recently this year learned this sort of phrase about, man, it's abundance verse. There was a cute word, but it was a lack thereof and it was sort of this idea that, that either resources were plentiful or not so much. And I don't know if it was my attitude or the actual state of the world, but while I was in visual effects, it really felt like there was not so much and it felt like I had to watch my back and be the best TD and if I shared my secrets then I might get replaced. Whereas now, lately I don't know if it's like the zeitgeist or my own maturity, but I'm much more subscribing to the view of abundance. So I share my knowledge and I share anything I have. I just say, "Hey, how about this algorithm that I just slaved over for two weeks?" Just use this random engineer on another project and that sharing an optimization of stuff has been so rewarding.
- Emily Van Belleghem I'd like to say two things on that real quick. One is, yes, that's amazing. Of course Sally would do that because she's just so amazing and wonderful and you know the hero of what engineers should be, but now-
- Sally Slade Now maybe.
- Emily Van Belleghem Well always, you were always on your hero's journey, Sally, you're now just realizing where you are.
- Sally Slade Thank you, that's very generous.
- Emily Van Belleghem But it's just cool. People who then use Sally's algorithm that she slaved two weeks over, please don't take the credit for it because that is a thing unfortunately for women like-
- Sally Slade Taking credit, let me go off!
- Emily Van Belleghem I don't know how common it is for other guys to take credit for other guys' work or other majority gender non-binary people who identifies as male, in the majority. But it's just very frustrating when you have a lot of barriers of entry and you have a lot of extra judgment placed upon you and then the work that you do is not acknowledged or is stolen by somebody else who doesn't have those barriers that they have to overcome. And it just is so counterproductive and annoying. It's just annoying to, one, not have your work acknowledged.
- Chris Nichols It's also the plot of almost every movie.

CHAOSGROUP

- Kat Harris You take one step forward and two steps back.
- Emily Van Belleghem And it's so frustrating because it's like this was a thing that proved that, unfortunately I had to prove that I was even an engineer, but it was the evidence that I was an engineer and then some random dude just was like, in a meeting, "I did this all by myself." And then it's just another consideration or point to management or to leadership or to people who can make leadership or management decisions that, Chris wrote that algorithm, not Sally. So when it comes time to promotion or comes time for bonuses or comes time to like put people in leads or give people more work or trust people's decision, it's, "Well, I'm going to trust Chris's decision on another algorithm that's similar to this original algorithm that Chris obviously wrote," or, "Chris made this awesome algorithm so I'm going to put Chris as lead engineer." When it was actually Sally's work, but Sally perhaps did not speak up because a variety of reasons of she was tired that day, or she wasn't even in the meeting to begin with, or because she was on a different team, or was sick that day-
- Kat Harris Because then she would be considered or all of a sudden she-
- Sally Slade Or confrontational. Instead of you know, speaking up or assertive.
- Emily Van Belleghem Well, speaking of giving credit, I recall now it is called scarcity versus abundance. First heard about it on Jonathan Van Ness' podcast, Getting Curious.
- Sally Slade Love JVM.
- Emily Van Belleghem I absolutely subscribe to scarcity for the earlier part of my career and I would justify those moments of taking credit for someone else's idea or harboring some research, not as my own but just as this is my throughput, I own this throughput, this is mine. And I wouldn't bother to attribute it to you know, GitHub or fellow PD because I just assumed it was a given. I would just think, of course I researched this, everyone knows that this is some idea that came from standing on the shoulders of giants, therefore it is mine. And this was just like a point of view, a very defensive sort of like the very thing I took for granted. And now I just find that so abhorrent. Like credit. Yeah, everyone you possibly can because why not? It's not subtracting from your value.
- Kat Harris The other thing too, though, its developed out of fear over time because our entire, at least my entire life, professional work, schoolwork, whatever, what have you. I have always constantly had to defend the work I had doing its value, what I had actually done. Explain every single little bit of it and

CHAOSGROUP

Kat Harris Oh.

Emily Van Belleghem And?

Kat Harris You have to explain every single bit, fight for every single bit. And then once you've done that it's like, I feel like it's hard to give up, but it's not giving up. It's sharing, it's your legacy.

Sally Slade It's, well, it's also goes back to a joke and I feel like there's so many jokes in computer science, which are just like, maybe we shouldn't be doing this and it shouldn't be normalized as like, Oh well you're creating job security. Well they'll never fire you if you're the only person who knows how this algorithm works. And I'm just like, if you're the only person who can read your code, your code is not good. Get out. I don't want you here.

Kat Harris You're the only person who knows what's going on.

Sally Slade If you're writing documentation for your code, get reprimanded.

Kat Harris Get reprimanded?

Sally Slade Yeah, go get reprimanded. Cause it's annoying, it's inefficient. And as an engineer, it's the most annoying thing to me. It's like your inefficiency is putting the whole project at stake. It's putting everyone behind because, God forbid, you get hit by a bus and can't work on the thing and you're the only one who knows how this section of the code works. And now it takes us a month because, one, your code isn't well documented, you didn't write it well, so it's impossible to follow, and it's just not modular. I see you have spaghetti shit everywhere and I'm just like-

Kat Harris No one likes spaghetti shit.

Sally Slade No one likes spaghetti shit.

Kat Harris What an image right there.

Sally Slade Its just so inefficient and annoying. If you write really good code and you share it, people will attribute you with writing really good code and sharing it.

Kat Harris Yes. And if you're that psycho genius that wrote that really spaghetti code that's holding the company together, they're not going to revere you.

Sally Slade They're going to eventually fire you.

Chris Nichols They're going to feel like you're holding them hostage.

CHAOSGROUP

- Kat Harris And they're not going last very long either.
- Chris Nichols At some point someone's going to write code that's going to go around that and then they don't need you anymore.
- Emily Van Belleghem Which they will do immediately cause the next project that you aren't on, they're going to have to do it anyway and then they're going to end up higher ups and CEO's or whoever is running the company is going to be like, "Yeah, Sally wrote this spaghetti code but EVB wrote this thing that just goes around Sally's genius and it's so much easier to understand. Let's just use EVB's stuff. Heck, we'll even-
- Sally Slade This is the first time this will ever be used.
- Kat Harris This is all theoretical, Sally is amazing and has never wrote any code like that whatsoever.
- Chris Nichols All that you did, you never took credit for anything that Sally has ever done.
- Emily Van Belleghem Sally is perfect in every way.
- Sally Slade That is not true.
- Chris Nichols You always end up as a superhero.
- Emily Van Belleghem I mean, she is.
- Chris Nichols What a name is Sally Slade?
- Emily Van Belleghem It is such a super hero name and people who are listening just know that I revere Sally as a senpai. She is the teacher and mentor that I've always wanted, and I'm so happy I met her, and I would say this any time of day or in any context. So this is not weird for me in any way, shape, or form. Sorry Sally, that I'm embarrassing you on live, not live podcast, recorded TV. But in the future, if I look back on this, I'll just be like, "Yes, I was speaking from the heart and everything I said is still true to this day." 20 years from now. Prediction.
- Sally Slade Beautiful, thank you for that.
- Emily Van Belleghem 2040 Sally Slade for president, or... Is 2040 in an election year? Probably not.
- Sally Slade I... Divisible by four.

CHAOSGROUP

Kat Harris Multiple of four.

Emily Van Belleghem So it is. 2040 Sally Slade for president. I'd be there.

Sally Slade Damn, I'll consider it. I don't see myself running for president, but I desperately want to not feel compelled to run for some sort of public office because if you read these bills, people-

Emily Van Belleghem I was about to say, you wrote Billbot, you're already starting down the path, Sally.

Sally Slade Holy shit, this shit's bot-

Emily Van Belleghem In 20 years, Sally, you will be. Imagine-

Kat Harris You're just starting on your hero's journey for your second half of-

Sally Slade You all need to be reading these bills. I swear to God, one eighth of them are just like, we are dedicating this public freeway to this person who planted this flower garden. And it's just like, can you not. Can you address homelessness.

Emily Van Belleghem Living in L.A. yeah, huge problem.

Kat Harris What a concept.

Emily Van Belleghem Didn't Amazon just... Bezos just donate something to someone?

Sally Slade Oh, because he botched all federal taxes and then paid like 0.1% of what that would have actually cost to just donate to some stuff for good face,

Emily Van Belleghem Which he could still do, anyway. Even if he was paying taxes because he's the richest person in the world.

Sally Slade But as my-

Chris Nichols Hold on. I actually... Bill Gates did a really good thing about that because obviously Bill Gates is a huge philanthropist, as we all know. But he talks specifically about the fact that philanthropy only pays minuscule compared to like public policy and taxes. And so you can't just say, well just pay less taxes and then the rich will just donate to the poor.

Sally Slade No, they won't.

Chris Nichols No, they won't.

CHAOSGROUP

Kat Harris They won't.

Sally Slade They won't.

Kat Harris They'll donate to their-

Chris Nichols Sorry. You don't need to get political about it.

Sally Slade Everything he's doing is legal, so we just need to close those loopholes. The end.

Kat Harris So that is your platform for 2040. Thank you.

Emily Van Belleghem All right.

Chris Nichols Now, we are at two hours and 20 minutes. Which, by the way, you guys can keep talking as long as you want. I just want to let you guys know the time. Or if there are things that you guys like, "You know what? We haven't covered this. This is really important."

Kat Harris Where's the list?

Chris Nichols Check out your list because I don't have this access to lists. I'm just recording this podcast.

Kat Harris My internet died.

Emily Van Belleghem I think we hit most of it. Was there any wrap up questions that you want, Sally?

Chris Nichols This is fabulous, by the way.

Sally Slade There's one thing I just want to drive home and I feel like we glossed on this earlier but I just want to share with our listeners-

Emily Van Belleghem Boys' clubs?

Sally Slade No. What does bias feel like?

Kat Harris Oh, that's a good one.

Chris Nichols Emily, you start.

Emily Van Belleghem Well Sally, you were starting it.

Sally Slade I just don't want to cut her off.

CHAOSGROUP

Emily Van Belleghem Give us time to prep our answers.

Sally Slade I mean, we can rip this band-aid off and put it right back on. But I feel like maybe some people are listening and they're just like, is it a big deal to be a woman in tech? Is it that bad?

Emily Van Belleghem These three are doing great.

Sally Slade We're doing great. We are doing great. Thank you. But also bias is a thing and here is what it feels like. It feels like an insecurity that you have that you cannot remove. So if something happens in the workplace, you will ask yourself, is this because of my gender? So-

Kat Harris Or race.

Sally Slade Or race.

Kat Harris Or identity.

Sally Slade Anything and, you'll just say, "Oh, I'm being paid hella less." Is this because they just saw me and they saw that I am Latina? Did they see me and they see that I am a woman? Did they see me and see my orientation? And just assume that they could pay less and that I wouldn't fight, or is it because I'm a shit negotiator? And like the reality check is always there. I mean, I am speaking for myself here, but I'm not so full of myself in my, air quotes, "predicament" that, that I'm thinking anything that happens to me that's in the negative column is because of my gender. But it's something that statistically you have to consider. Was I left out of that meeting because of my gender? Was I labeled a designer and not an engineer because of my gender? Or was it because of my mad artistic skills and my ability to design the shit out of everything, even though I'm literally engineering just like the man sitting next to me and all we're doing is engineering on this project.

Sally Slade Like these-

Emily Van Belleghem He gets to build the engineering and you have to build the design?

Kat Harris Yes (affirmative).

Sally Slade Yes. These are the kinds of things that you just have to ask yourself, not because you're paranoid, but because statistically it is viable and valuable to ask yourself. And that to me is what bias feels like. And that, to me, defines... Has defined my journey as a woman in tech is just questioning everything and wondering if it's because of the female expression.

CHAOSGROUP

Emily Van Belleghem And for listeners, nine times out of 10 you will never get an answer.

Sally Slade You won't.

Emily Van Belleghem Like very rarely will you have the opportunity to ask management. And very rarely will they actually, give a truthful answer.

Chris Nichols Is it hard to define it? Like if someone said, "We didn't invite you to this meeting because you're a woman and we assumed you need to go home because you have kids to take care of," as an example.

Sally Slade That never happens.

Chris Nichols But, well it does.

Emily Van Belleghem They'll never tell you that though to your face.

Sally Slade Sometimes they will when they're like drinking or feeling vulnerable.

Kat Harris Well they will also-

Emily Van Belleghem They'll go hide behind the whole, Oh we were trying to be considerate.

Sally Slade Then that's like you just turned it on its head upside down. That's not the point of-

Emily Van Belleghem Well, wait. Keep going though. What was the final thought?

Chris Nichols I'm not going to go on with this story because its personal. But that happens. Oh we assumed that you didn't want the promotion because it's going to be more hours and you have kids to take care of.

Sally Slade It also happens. It also happens the other way.

Chris Nichols Doesn't that just make you angry?

Sally Slade It can also happen of, did I get this promotion because I will now be the only female lead in the company and that looks good.

Emily Van Belleghem And it's just the thing that we have to consider.

Chris Nichols Oh, reverse bias.

Sally Slade Where it's like still bias.

CHAOSGROUP

- Emily Van Belleghem She only got that because she's a woman. They just want more women in power.
- Chris Nichols I actually want to be serious because this has happened. So women in tech is a big subject right now. Big subject, especially if you were planning a conference. and you want to bring as many women as possible into the technology area. To talk about women in tech and to represent female empowerment, which I'm all for. I'm all great about it. It's all good. But I feel like a lot of women are put on the spot and I know that. And I'll say this too, it's like maybe we did this with you guys to talk about that specific issue and does that feel BS? Because that's not-
- Sally Slade The tokenization.
- Chris Nichols The tokenization is like, Oh look, she's a woman and she's a, you know, marine biologist. Fabulous.
- Chris Nichols So like what's the point? I... Honestly speaking, I love Sally and Sally's work for all those reasons, including the fact that she's a woman. And I think that's actually an important part of why I think Sally's special is because she brings a female sensitivity to an issue and to an industry that needs it. And I've known you guys very briefly, I've worked with Sally so I can only say this more personally, but that's what is so cool. Sally's got some great ideas and she brings a different point of view, someone who's actually tested the hand dispenser, Oh, you know what? This shit don't work.
- Emily Van Belleghem Real quick. As much as I love Sally and thinks she's amazing and wonderful and is perfect in every way.
- Sally Slade Thanks, bae.
- Emily Van Belleghem Thanks. Sally, is... There are many Sallys out in the world.
- Chris Nichols There are many Sallys.
- Emily Van Belleghem And that's what's sad, is that a lot of people don't realize that there are actually a lot of goddamn Sallys in the world.
- Chris Nichols There are. And I hate to be Sally to be tokenized in that way. And I hate for you guys to be tokenized in that way. But I love how this conversation went because you know it's been two and a half hours and I was like, okay, here's what we're going to talk about because I've done these conversations and you guys took it a completely different way and you gradually brought it back in a really great way.

CHAOSGROUP

- Kat Harris Well, I think-
- Chris Nichols I want you guys back, a lot.
- Emily Van Belleghem We should do a-
- Chris Nichols You should have your own-
- Emily Van Belleghem We'll do a miniseries.
- Chris Nichols Spin it off into another podcast and I won't even talk.
- Kat Harris We'll do a mini series.
- Sally Slade Well I like having your perspective here too because I like to hear what... When we say something I like to see your reaction to stuff.
- Kat Harris Diversity is good.
- Sally Slade Exactly. And that's the other thing that I wanted to quickly mention was like diversity doesn't mean no men. It just means a mix of a lot of different perspectives. And so when people are like, "We want more women at conferences," I'm like, "Well then put women on the board of the conference that you're trying to make because they know how to get other women involved." And if you have one at the very top and in the middle and at the bottom, not just at the top where it will, quote unquote, "trickle down" or not just at the bottom where they'll grassroots it, it needs to be at all levels. If you have an equal number, not just the one token, it no longer becomes a token and it becomes just another voice in the room because it's supported at all levels with a bunch of different people. And it's like cool, she's not the one voice for women. He's not the one voice for men.
- Sally Slade If a guy wants to stay home with his kids and actually doesn't want the promotion, that's fine. And also if a woman doesn't want a promotion and wants to stay with her kids, that's fine too. But it needs to be fine for whatever gender you... What is it? Like whatever gender you-
- Kat Harris Express?
- Sally Slade ... Identify as, or express. It shouldn't matter. And that's the hard part.
- Emily Van Belleghem And to Sally's point we might eventually get there one day and that would be so nice.
- Sally Slade And until we get there, my message to others-

CHAOSGROUP

Emily Van Belleghem Vote Sally 2040?

Sally Slade No. Is that, it's, at least from my personal experience, it has been okay to be a token. Like I do not mind the insecurity and weird feeling of did I get invited to this panel because I'm a woman. It does not matter. Like you need to put that aside and consider the audience and the young person in the audience who's like, "Oh, I could, I could be that. I could do that. She's so cool." They're not necessarily thinking about, Oh, were you in invited there because of your gender? They're just excited to hear your perspective.

Chris Nichols It's the old white man that's going to say that in the background. And, I'm sorry, but that's the case. Someone's going to say that in the background and they do say that, but don't worry about them.

Sally Slade Don't worry about it.

Chris Nichols Don't worry about them. Worry about the young girl in the foreground that's going, "Oh my God, I want to be like her."

Sally Slade I am personally okay with the concept of being a token. As long as I feel like we still have work to do and I can take advantage of that and help.

Chris Nichols Nice way to say it. Great way to say it.

Kat Harris Let's end it, sounds great.

Chris Nichols I love it.

Sally Slade I only have a couple of words. I'm sorry.

Chris Nichols Don't be sorry, you ended the podcast, you dropped the mic on this.

Kat Harris Can you sing those words?

Sally Slade No, I'm not going to sing!

Emily Van Belleghem Did we not give her enough wine?

Sally Slade I had a nice hearty glass. Thank you very much.

Chris Nichols Good for you guys. I'm... Thank you so much for doing this, guys. Did you guys enjoy this?

Kat Harris This was a great time.

CHAOSGROUP

Sally Slade Thank you Chris for you know, giving more women a platform.

Chris Nichols I'm only saying this because I want to have it again. If you guys are up for it, if you guys have more subjects, any other ideas or things you want to talk about.

Kat Harris It's always infinite.

Sally Slade It can be done.

Chris Nichols And just about anything. Obviously it doesn't have to be anything about inclusivity or gender.

Sally Slade So, Dungeons and Dragons and my new TV show about mixed reality.

Chris Nichols Yes. Actually I have so many things to tell you guys, but it's so exciting. So exciting. Well, thanks so much guys. I appreciate it and I thank you for taking over this podcast.

Sally Slade Oh, well thank you for having us. Thank you for sharing your platform and being a chill ally.

Emily Van Belleghem And Bella.

Chris Nichols Bella.

Sally Slade And Bella, the dog for not being overly boisterous.

Chris Nichols Oh no. I think she, all she needed to do was to roam around the room a little bit, and then she was like, chill.

Sally Slade Just secure the perimeter.

Chris Nichols Yeah. She did good. And I can hear her licking. That's good.

Chris Nichols Bella has concluded. Thanks guys

Sally Slade Thank you.

Emily Van Belleghem Thank you.

Kat Harris Thank you.