

# Episode 8 Transcript: Walt Disney Imagineering – Research & Development and AR/VR Design Engineering

# Ashley and Tony (Podcasts Hosts)

Welcome to the Disney podcast, the show where you discover what it's like to be part of the story and a career with Disney as we bring the Walt Disney Company's core values, culture, and work to life. We're your host, Tony Williams and Ashley Siegel, and we are going to share some remarkable stories from the perspectives of the people and the teams behind the magic.

# **Ashley**

This week's episode is all about the exciting world of Imagineering. Walt Disney Imagineering is the creative force that imagines, designs, and brings to life all Disney theme parks, resorts, attractions, and cruise ships around the world. Founded by Walt Disney in 1952, it embodies a world class design firm, premiere development company, extraordinary storytelling studio, and cutting-edge innovation lab all rolled into one with an overwhelming breadth of expert talent from around the globe. Speaking of talented Imagineers, let's welcome to our show Research and Development Imagineer Jonathan Becker. Hey, Jonathan.

#### Jonathan

Hi, guys.

#### **Ashley**

I'm so happy that you're here with us today. Imagineering is one of my favorite parts of the company. I'm always just amazed at all of the magic you all are bringing to life. Why don't you tell us a little bit about yourself and your role?

#### Jonathan

Yeah. So, Jonathan Becker here, Senior R&D Imagineer. And what we do is like sort of five to ten years out and see where technology is going and what kind of new experiences and attractions can be enabled by, you know, advanced robotics or AI machine learning or my case exoskeleton technology. So really just thinking about how to continue to evolve and plus out the guest experience in our parks and cruise line and hotels, everywhere.

## **Ashley**

Yes, you all are really the ones who are imagining what the future of all of our properties are going to look like. It's so amazing. So how does someone get into that kind of work? How did you get started with the company?

#### Jonathan

Well, you know, everybody has a different Disney story. I think specifically for me, my Disney journey has been sort of all over the place. And I really want to make sure that I stress that because I know a lot of people who are listening to this or thinking, how do I end up there? And there's no one sort of like straight and narrow path. So, I did my undergrad actually at the University of Notre Dame, and I studied something not technical at all; anthropology and Portuguese-Brazilian studies, so really just another kind of ballpark. And ultimately came to realize that I just I want to explore something else, something different, you know, that happens in school. You try on different things, and it just wasn't really working out. I was really interested in the subject matter, but in terms of a career, what I want to do with the rest of my life, I kind of wanted to do other things. So, I grew up playing music and sort of tinkering around with electronics. I ended up finding a program, a grad school program at the California Institute of the Arts or Cal Arts for short called Music Technology, Interaction, Intelligence and Design. And basically, that program's all about creating audio visual work that sort of combines music and technology in sort of compelling ways. So, we'll like literally make instruments or make robots make music. It's sort of like, how do you take mechanical engineering, electrical engineering, computer science, and make cool, wacky, crazy things, where it's like weirdly has corollaries to Imagineering.

#### **Ashley**

I love that, though. We like – that journey. And it's funny, I too, I have a really nontraditional path from where I came from, but I always love to hear those things. I studied what interested me in school too. I have a degree in Judaic studies and religion, and then I have another degree in sports journalism. I don't work in either of those, and I think it's important that people are challenging themselves both to study what's important to you and then go out and potentially have another career. That's totally a different direction. I think that's so cool to hear.

#### Jonathan

Exactly. And you know what's so cool is I use my anthropology training everywhere, anywhere, both in and outside of work. You know, anthropology is the study of human cultures. And so really understanding how people view the world and what their lenses are really just sort of helps me engage and connect with people and establish the right kind of rapports that we can build things, or we can sort of connect beyond just like, oh, we built this attraction. It's like you're really building a community and a sort of cultural group, and I think it's super important. So, I was at Cal Arts and my thesis work was sort of focused on how color and sound can be sort of tied together in a virtual reality context. And basically, I did a demo version of this thesis during my, my grad program, and an

Imagineer ended up coming up to the Digital Arts Expo that we had every year. And basically, tried my demo on, put the headset on, and afterwards gave me his card and was just like, Do you want an internship? The lottery! Like the lottery of lottery. And so, we ended up, what I ended up finding out is, and this was like around 2014, so we were trying to develop Pandora out at Animal Kingdom and there's specifically like this drum circle interactive that this Imagineer Jamie Robertson was sort of helping with sort of figuring out how we could both do it from my experience standpoint as well as like from a technical standpoint. So, he had been doing some development and then when I came in, he kind of passed it off to me to do like a lot of the day-to-day work and thinking about like creatively what this experience is. But then also technically how to realize it, which is kind of what my skill, my skill set is. It's like I can think creatively, but then once I think of the creative, I can build it as opposed to like having to sort of be like, oh, I don't know how to realize or make this thing. And so, I had to enlist other people to kind of realize that that sort of vision. And so that's kind of like my one, like real sort of strong ability is like I kind of play in both creative and technical worlds and not just one of the other. I'm sort of like a fun, little creative technical unicorn. And so, I got brought in and I did this internship for a year and kind of like my thesis at Imagineering as an intern was in grad school. So, I was like doing part time grad school and part time Imagineering, but basically was sort of finishing out that proof of concept of this drum circle interactive. And that's really kind of what got me the job was basically like, okay, make sure you graduate, which was like a challenge, and you got a job here. And I came in as an R&D Imagineer, an Associate Research and Development Imagineer, and I've been there ever since. So, this is yeah. I think the timeline is fuzzy, but I'm trying to give math. I've been there eight years. 2014, it's 2022 now. Yeah. So, eight years, I think literally like in June just turned eight years. And yeah, that's kind of how I ended up there.

## Ashley

That's such a great story. I think, you know, there's so many things that you hit on there that, that I want to make sure that we're kind of digging into for our listeners, right? Like Disney employees, especially Imagineers on your college campus. Right? We're out there, whether it's virtual hybrid engagements or actually coming on to campuses like that's the power of networking, right? You were there, you had this thing. You got to show somebody who is here and what an awesome way to really bridge that and then to come in as a professional intern with Imagineering. I don't think that there's anything cooler than that. It's just amazing. I know we have some of your current interns with research and development. Some of them we heard from the Grace Hopper celebration. We got to see one of the recently. It was very exciting. And so, I think that's just so exciting, and I think brings a lot of hope for people that can see. Right. Like I can do that too with things that I'm building on my own that I want to really be developing that are really those skills. I think that's awesome. And then you were talking about the project with Pandora that you were working on, and that's as an intern. So, what did those responsibilities look like during your internship and how did it change when you became full-time?

#### Jonathan

In terms of the drum circle? I mean, that was literally my life for a year. I would come in in the morning and work all day beating on drums and trying to figure out like, is this working? Is this correct? So, there is an element of like, you know, throughout the week sort of taking feedback from the previous week and trying to figure out, okay, what are next steps and how to sort of explore where this needs to go creatively. And then we just sort of playtest at the end of the week, we'd bring in folks and see how they actually played with the interactive we were making. And then, you know, you have a vision. And I think the important thing is always evolving because it's not just like how you feel about the thing, it's how other people feel about a thing. I think the big challenge there was not everybody's musical. And so how do you make a thing that is like engaging and like no matter what energy you put into the system, what sort of comes back out, works with all the other people who you may not know and who are just trying to, you know, vibe out in the space. So that was basically my life is like I was working in what's called the concept lab, and that's where we do like these guick and dirty mockups that give the idea, have some light gaming and so are kind of like our sort of entry level way into like what eventually becomes a theme park attraction. And so, mockups are like the lifeblood of Imagineers, you know, beyond just like making concept art or sort of like drawing things out on pen and paper. And then when it comes to this idea of like, I recognize how lucky I am, but I think that luck is really just this combination of like being prepared and then sort of like having that moment where like that preparedness can sort of shine through. You know, the timelines are always to be different for everybody else. But, you know, I put myself in a place where that can happen. You know, Cal Arts has a history with Disney, right? And it's sort of like a simple way of think about it. It's like Disney founded the school in the sixties, you know, Walt Disney. And so, I think that choice, you know, regardless of like I wanted to pursue music technology, but I also put myself in a place to be seen. You know, I don't know if I was at a different university that maybe the opportunity wouldn't necessarily come. So, you know, doing research, a little bit of like, you know, the history of places and who sort of comes out of there. You know, I definitely, I Wikipedia a lot. You know, when I see people who inspire me, I kind of want to know what their backstory is and how they got there. And so, like, when you see like, oh, this person went to Cal Arts, this person was at Cal Arts, it kind of started to connect the dots of like, oh, this is also potentially like a great springboard for a creative to potentially, you know, end up in sort of this fun Disney World that I'm in now.

## **Ashley**

And now and then every day you're surrounded just by actual Disney legends, right? Like constantly you're getting to work with all of these people that built our childhood, it's like that's just.

#### Jonathan

Yeah!

## **Ashley**

That must be so mind blowing. I had the amazing opportunity to take my team to R&D recently, and we got to meet Lanny Smoot. And, you know, a lot of my team runs the Disney on the Yard or HBCU work for historically black colleges and universities. And to have that moment where Lanny is telling us about how it's been to be a black inventor, right? Like, I could only imagine what that's like, what it was like when he started and to see now, and to have people like you coming in and doing this work like, oh my god. It's just so amazing to see how all of that is really powering all this magic.

#### Jonathan

Well, what's so cool, I mean, like, Lanny is a living legend. I mean, guy has I don't know how many patents now, but he's like recognized like at like the patent museum, you know, and being a black person myself, seeing somebody like that have such a storied career is just so inspiring.

## Ashley

So inspiring, right? Like, we can do anything if Lanny can create over 100 new things. It's just amazing. And all in the name of, like, entertaining us and inspiring us and just creating new magical experiences, especially for families, which I think is just so, it's I mean, what keeps us all here. It's why we do the work.

#### Jonathan

Mm hmm. No, I mean, what we offer to the world is so unique, and we're just kind of in a class of our own, so it's, it's a privilege, you know, we both do amazing work and inspiring work, but I'm very humbled and privileged that I get to be a part of it.

## **Ashley**

It's awesome. So, let's talk about now. So, you do this internship, you get converted, which is so cool. And the dream, right? If you're starting your career with us in college, we want you to continue it. So now it's eight years later. Sorry to age you.

#### Jonathan

(Laughs) Oh no!

#### Ashley

Now you're in this role. You're a seasoned veteran. What does it look like your day to day, especially now I assume a hybrid world. You're doing some of this at home, some of this in person. What does that look like?

#### Jonathan

Yeah. I mean, basically, my mornings are here at my place. Where in which I'm having meetings, I'm slacking folks. I mean, Slack is like literally keeping the show running. As well as answering emails. So, I kind of take my morning to do those very, very important things, that sometimes it's really easy to get so caught up in the like the physical work you

know, I keep making the thing that sometimes you forget about that stuff. So, I just want to stress that, like, I really make that part of my day, making sure that I stay connected, I stay on top of all those responsibilities. And then after lunch I go in and I work very intimately with the lead mechanical engineer of the project I'm working on, Project Exo. And doing a variety of things, getting feedback from the design work or like in the case of what we're building, actually getting into the suit and trying things out, both of us sort of doing our commentary, giving feedback. And, you know, we have a little work area where we can like take off an arm and do actual repairs, mechanical repairs on a thing or like, oh, we have to switch this thing out. It's very like Tony Stark in a sense of like know in a montage scene where he's trying to figure out like the Mark I, how it's going to work. It feels very much like that. It's like, if we did this, what would this do? Oh, I like that. Oh, I don't like that. And it's super iterative. And that's kind of like what my afternoon looks like. Also working very much in conjunction with my technical product manager, Clara, thinking about the entire holistic thing that is this project not just sort of like the very granular, like, oh, hey, this range of motion, but rather like we had this whole team working with outside vendors as well to kind of really think holistically about what this thing is, where it's going to live and kind of, you know, what is the guest experience so that's really kind of what my day to day looks like, on most days.

## **Ashley**

Awesome. Well, we've mentioned Project EXO a few times.

#### Jonathan

Yes!

#### **Ashley**

So, you are working to bring characters – of all sizes – to life in authentic ways at Disney Parks. One of those ways is a full-body exoskeleton system you're helping to develop. How did you get involved in Project EXO and what is your process of taking on a larger-than-life project like that?

#### Jonathan

Yeah. So, this project has been going on for like the last two and a half years, you know, COVID kind of like change some things that maybe that timing isn't exactly right, but it's essentially baking in the oven for the last two and a half years. And it was, you know, basically I had an idea of like, you know, you think of all the different characters that exist, and at a certain point, you know, they start to scale up in a way that traditionally in costume, character space, making a costume would be a bit difficult, both just making it, but then performing in it. Basically, I want to start thinking about like how can we build certain characters, and I ultimately stumbled on this idea of an exoskeleton. So, I'm not an exoskeleton expert and but ultimately have had sort of done enough research to really understand what they do and how they sort of enable these kinds of characters. So basically, an exoskeleton is a skeletal intermediary between like an arc - a performer - and a costume that gives assist in key joint area. So the performer doesn't necessarily have to

lift big giant arms around the exoskeleton does it, for them. And then beyond that, we're also routing all of the weight in the costume into the ground. This system routes it so really, you're just puppeteering this big giant body around and not necessarily feeling the weight of it. And that was kind of like the key to enable this sort of larger classic costume character. It's like oh, when I'm standing, I don't feel any weight of the costume. And then on top of that, when I want to perform and emote, I'm not doing the lifting. And then the cool thing about that is, you know, if you have an assist at those key joint areas, you can start doing things that you may not have done traditionally in the past, right? So, if you want to articulate fingers that means you have to have mechanisms that allow for a performer to be here, and then the controlled big, larger fingers sort of beyond their body and so that ultimately what that means a heavier costume. And so, traditionally in the past to try and make them as light as possible you don't really have those articulated fingers, so some characters that kind of just have those static hands that kind of lock into fist position. Our characters now can sort of reach out and emote and express and interact with guests in ways that are just exciting. Like the simplest things, like seeing a big giant hand go like this and give you a fist bump or try to shake your hand, just take it to another level, you know, so yeah, that's EXO.

#### Ashley

Yeah, I feel so similarly. It really is. It's that impact. It's that, that ultimate of seeing a guest in the park or being able to see people's reactions to our films, whatever it may be. Disney+ launching. Like, I think all of that is just so special and it means so much to families. I'm a kid of the nineties too, so it's just it to be a part of that is so amazing. So, for any of our listeners or viewers out there, you may not have known that you want to end up at Imagineering, but I do. What's your best advice? How can they how can they prep themselves? What should they be doing? What should they be playing with? Or researching or teaching themselves or getting that education in?

#### Jonathan

So, I mean, there are so many disciplines that make up Imagineering. And so, my advice is to find what you really love first. First and foremost, it shouldn't be about I just want to be an Imagineer. It's like, well, think about the Disney Park context, right? And if you see yourself as Imagineer, what aspects are you drawn to? And then from there you can kind of reverse engineer like, well, I need to be focused on like let's say mechanical engineering or computer animation or, you know, like the thing that I didn't realize is like robots and how they're programed now is basically how we do animation for CGI films, the animation studio, that sort of thing. Right? So just like connecting those kinds of dots, I think also, you know, we're now an age where you can literally reach out to people. So, things like LinkedIn are really great. So just like trying to find some Imagineers and you know, potentially, you know, at the very least get, you know, some feedback on like what you're doing and sort of hearing their stories. And yeah, I think maybe the last point is it sort of reaches back to my own personal story which is like think about those universities or colleges that have some sort of history or connection to the larger Disney family. I think there are definitely some like sort of feeder schools that kind of like create that next

generation. And I think if I was able to find it ten years ago or so, I think you can now to, probably much more easily so just yeah, from that networking standpoint, it's just like put yourself in places where like there is history or ties into the larger Disney family and I think that helps, you know, outside of your focus and getting good at what you do, you're going to be seeing, or at least much more easily seen. So those opportunities are much more prevalent.

## Ashley

I love that. I think you touched on so many great things there. There really are like you said, there's so many more opportunities. We're out there in so many more places now. We're on so many more campuses. Everything we're doing if it's not virtual, it's hybrid, right? There's an opportunity to meet us in person and virtually we're reaching more people in more places than we ever have before. And so, yeah, do the things. If you're doing something that you love, that's something I always remind people. Like if you're doing something that you love and one of our technologists or Imagineers or recruiters is asking you about it, you're going to light up, work on things that bring that out of you that really are that magic because that's what will get noticed, that'll get you hopefully that foot in the door. It clearly worked for you. And there's just so many new, new ways to do that. So, love it, such good advice.

#### Jonathan

Yeah. Awesome, cool. Yeah. Find what you love and do it.

## Ashley

Absolutely. And bring others along. That's what it's all about. All right. Well, thank you, Jonathan, so much for taking us along your career journey. It was so exciting to hear about everything that you're doing with Imagineering, giving us, this look behind the curtain of all the magic that you and the teams are making and how that is impacting all of our guests and consumers around the world. So, thank you again for being here.

#### Jonathan

Oh, thank you, Ashley. It's been a real pleasure. And hey everybody, bye.

#### Tony

So, we dove into the world of research and development at Walt Disney Imagineering. Now, let's take a look at a different side of the stories Imagineering team and welcome AR/VR design engineer Emily Van Belleghem. Emily, welcome to the show.

## **Emily**

Hi, thank you. It's great to be here.

#### lony

It is great to have you. We know you probably have a pretty busy day. So thank you for taking some time to chat with us.

## **Emily**

Of course. Yes, anything, I'm so excited about this podcast.

## Tony

As am I. I am so excited about the folks I get to chat with. Today, we all have a chance to learn so much more about Imagineering, which I think is one of the more famous sides, right, of the organization. Knowing all of the amazing work that comes out of your world that we get to see and that we get to enjoy. And so now to go behind the curtain and learn a bit more about how you make the magic is really a treat for us. And so, let's jump right in. Would love to hear, and we've chatted a bit already about kind of Imagineering, right? What for you is Imagineering and is it different now that you're a part of the team than from when you first joined the team?

## **Emily**

I've heard this quote a couple different times, and so I'm sorry if it's a repeat, but I definitely believe what makes an Imagineer is curiosity and the curiosity, not just of everyday life interactions, but into the unknown. And what does that future look like for us in terms of interacting with one another within our relationships, friends, and family. And of course, in the world of theme parks. So I would say since joining Imagineering, that has definitely not only been front and center, but it's been amplified. The curiosity is such an important factor in how we do work and how we communicate with one another and decide what we're going to do next.

## Tony

That's awesome. I'm now imagine imagining, Imagineering is this place where everybody just has like a call out bubble above their head with the question marking it all day long. And you all are like, what about this?

#### **Emily**

Yes, that's pretty much what it is, we're all running around a little question marks above our heads.

#### Tony

Amazing. And so, I'd love to hear how you joined this, this group of curious folks. Right. Can you walk us through your story? How did you become an Imagineer? How did you get here?

#### **Emily**

Oh, man. Well, let's see. So, I started in actually holography back at school I went to MIT for undergrad and masters, and I was studying, Future Human Interaction with Novel Interfaces. Specifically, holographs, holograms, and light fields. And I would say that was probably the beginning of the entry towards Imagineering. I have worked at Disney a couple other times before, mostly for graduate internships. I was at Disney Animation Studios for a bit. I got to work on some behind the scenes tech for some of the movies

that came out like Wreck-It Ralph 2, and I was there while *Moana* was in production, so that was really exciting. And actually, the first time I came to Imagineering as an intern was in R&D. But now I'm in the tech studio and it's really wonderful because I get to speak with every different type of Imagineer that there is as a design engineer. A lot of what I focus on is understanding how people interact with, like I said before, a novel interfaces that you would never think of, but also how they interact with different types of technology that are up and coming and how we can incorporate that into our work in our daily lives, VR/AR being one of them.

## Tony

Awesome. So, your world sounds so forward thinking, right? And that curiosity that you just mentioned sounds like it's a key factor in that world. Right? Which is incredibly interesting. I've already noted my first term that I'm going to have to Google, but you defined it for us holography, which I'm guessing is the study of holograms in that world.

## **Emily**

Yes, holographs and holograms. Right.

## Tony

Did not know that that was a thing.

## **Emily**

Yes. Most people, when they're thinking of their first understanding of what a holograph or hologram is, it's the Princess Leia effect from *Star Wars*. Of course, that's probably what pops into your head. But yes, it's the 3D recreation digital representation of objects in space. I also did a lot of work with Pepper's Ghost Solutions, which are not official holographs or holograms, but it is a light field display and one of the ones that I was working on in school was this little cone that you can walk around and see the illusion from almost 180 degrees with eye tracking you can go to 360 degrees. But essentially you could put something on a table and have everyone discuss that object that was sitting in the of the middle table. And so of course I put a tie fighter in it, and that was my, that was my test animation.

## Tony

So, you've mentioned quite a few projects, right? And so, my mind is like jumping all over the place as I hear them. We love to hear more about your work, what you're currently focusing on. We know you can't probably share everything, but whatever you can share, what are you working on these days?

#### **Emily**

Oh, boy. So right now, we are working to buff up our design department within the tech studio. So, a lot of what I do is I oversee some of the design work that we are doing on a few different projects one of them being pre-visualization of our attractions. And we also

do quite a bit of work with, or I do personally have quite a bit of work with our audio animatronics pipeline. So, understanding how we can utilize, of course, newer tech. So, for our previsualizing of attractions, we would use quite a bit of different hardware for that. Of course, VR and AR, I believe has been there's a few different videos on it and I think even there was a special presentation on the DISH on Disney+ if you want to check out the Imagineering story there, that's a super fun series that I loved. But that is the world that I come from in terms of attraction previsualization. And then I also do, like I mentioned, the audio animatronic pipeline. We have quite a few audio animatronic figures that we have at Imagineering, and so I am responsible for trying to figure out how we can manage that data and understand our figures better so we can make, of course, more figures for the future. That's just two of my main projects, but I'm also one quite a few more I think in total I may be on seven. And so overall oversee how are we can run towards our design initiatives for the studio and make sure that we are staying in concert with one another and in theme with sustainability and long term, you know, just product growth.

## Tony

It's amazing but not surprising, right, that not only are you all designing and building and rolling out this amazing tech, but you're also tracking the data, you're iterating on it and how can we make it better, which I think is such a uniquely Disney question to always be asking, right? How can we improve the experience of our customers, of our guests, of our employees? Right. I think really, really unique Disney question there. And you are working on a number of projects, right? Do you have one that either now or maybe in the past you say is kind of the highlight of your career?

#### **Emily**

Oh, man, a highlight. I want to say that probably the attraction previsualization work. We are also doing some cool work with some *Spectacular* previsualization. I hope to join that team soon. But I think that the work that we were doing with attraction previsualization is very cutting edge. We use some impressive hardware like FRVs combined with VR headsets and we really kind of make the impossible possible on that front so we can gain our creative directors and producers, that guest perspective before we ever even break ground, which is just so impressive to me that we're able to put this together.

#### Tony

Tell us more about the attraction previsualization. Right. I've got a pre visual in my head of what it is, but what exactly does that entail? Especially, did I hear *Spectacular*?

## **Emily**

Oh, yes. So, our shows, so previsualization is essentially the concept of putting all of our 3D assets into a world so that you can look at them before we even build them. Right. And so, let's say you're looking at a new chair that you want to put in at a restaurant, maybe even. Right? Well, you can go put that chair in 3D space and light it and color it and texture it and walk around it, maybe even with a VR headset on to make sure that

that's definitely the chair that you want before you even go and purchase it or have it fabricated. So that's essentially what we are doing with our attractions. We take the 3D assets that we have, and we put them into a game engine and then we visualize what we sit in a ride like a little digital ride, and we watch the ride as we go through it and make sure that it is up to par with the storytelling devices that we want to use up to theme with what we want to say and the attraction, right? What story end to end do want to tell. Can we ride it over and over and over again across you know, of course a long period of time to make sure that we are really on point with what we what we want to teach as we're going through our attractions.

#### Tony

I get it right. You have to kind of ground yourself when you are kind of doing the work that you've worked hard to be able to do. Right. And you're finally in that room, you're in that space and having these awesome experiences. But we know everything, right has kind of its ups and downs, right. What are some of the challenges that you've experienced in this work?

## **Emily**

Personally, as a brown woman in tech, that sometimes is a challenge in trying to get into the right doors or to talk to certain people, and I have not experienced this at Disney. So that's awesome. At Disney, though, I think my biggest challenge is things are moving so fast. We're trying to get things to our guests so quickly. We want to have everyone experiencing things, and sometimes I wish that I had a little bit more time, but I think that's also part of the adrenaline rush, you know, like this is kind of key in order to keep us going and to iterate on the ideas quickly. And it's almost like that brainstorming mindset that if you didn't have the time constraint, you wouldn't have that kind of brain blast moment when everyone's like throwing ideas on the floor and seeing what'll stick. So, I'd say yes, like timing is, is hard sometimes, but at the same time, I kind of like it. I like the high-speed environment. I do well in that.

#### Tony

Awesome. I'd like to ask more about your experience as a brown woman in this space right how often do you walk into rooms and feel that you're maybe the other or the only? And are you seeing representation kind of improve in this space?

#### **Emily**

Oh, definitely. So, I'm Indian, Japanese, I think, and then Belgian, Canadian, Spanish, if I remember all those, my mom's side is Indian and Japanese and my dad's side is the rest. And I'd say the biggest thing that I come across is, is when I speak towards something that I have been studying for many years and it gets passed off, as kind of like a side comment or something that didn't really matter. Oh, a slight suggestion or something. And I think some things sometimes that has encouraged me to learn a little bit more about myself and how I present myself, I suppose, because since then I have started to speak a little bit more with certainty instead of ending sentences with, does that sound okay or did that

make sense? I force myself to try and stop saying those phrases anymore, or even to request permission to have space or to take a presence in that room. And so, I think, I mean, it's been a few years now, quite a few years now that I've been in industry that has definitely aided in me. But I look forward to a future where you don't have to change those aspects in order to have a voice in the room. One thing that's really exciting, though, especially for our previsualization work, most of our pipeline developers are women. I think almost an entire team of women are pipeline developers, and a lot of us, also our Grace Hopper Celebration alumni, which is super exciting, and it's been such a thrill to be in a room where you're not the only one. I'm very used to being in a room where there's 50 men and then there's me and I'm just kind of there. But it's been really a breath of fresh air. It's really cool to speak with others who come from similar experiences as yourself, and I really cherish it.

## Tony

Thank you. Thank you for sharing that experience with us, and kudos on doing the work for and with yourself, right? To get to a place where, you say, hey, I don't need to add these things at the end. Right? My words are very valuable, and I hope that the spaces that you're in continue to value your words in the ways that they should, right. And I hope that as the organization we continue to support making those spaces what they need to be for you. So happy to hear that you are a Grace Hopper Alumni, did I hear that, right?

## **Emily**

Yes, yes, yes. Quite a few members of our team are as well.

#### Tony

Awesome. Grace Hopper is certainly one of our one of my favorite engagements that we have an opportunity to meet so many amazing technologists' women and non-binary folks that have come to Disney through our engagement with GHC. So awesome. That was really cool. What a pleasant surprise. I didn't know that. \

#### **Emily**

Yeah, and I meet so many inspiring women at that conference too. I personally, it's always a highlight if I get the chance to go, I hope I get to go with Disney this year.

#### Tony

So, for anyone that's listening right and has been inspired in the way that I have. Right. And is now interested in getting to where you are. What advice would you give someone? Right. No matter where they are, they're in school, in careers thinking about changes. What advice would you give them to kind of help them along their journey, maybe to being an Imagineer.

## **Emily**

Okay. Well, I hope if you're already asking that question, then you're definitely curious, so the first checkbox is checked. I'm trying to think of things that are not as practical. Of

course, be buffing up your resume and getting your website going, putting your portfolio projects on it is all good advice too. But I would say for me it took me quite a few tries to get in the Disney door and so I would say the most, the best advice I could give is just don't give up. Keep trying because one day that door is going to budge open and you're going to get in. And I would say that even if you apply like five times, six times or you, you're just really passionate about something else. Maybe it's not Disney related, maybe it is. Maybe its storytelling related, right? Just keep trying. And then that willpower is going to see you through in whatever you do. Even if there is a rejection or even if there is an acceptance.

## Tony

Amazing. I think we we've talked a lot about curiosity right. But what I hear is kind of the undertone for all of this is a certain amount of tenacity, right. To be willing to try and fail and go cool and try again. Right. To have a portfolio, to put your work out there for others to evaluate and see. Right. That that can be a little difficult. Right. But it sounds like curiosity has to be paired with tenacity to really grow in this space.

# Emily

I would definitely agree. I cannot count the number of times that I have failed in my career. I would never say that they were failures, though, because it is from those learning experiences that I was able to move forward and become better. And you don't quite get the same experience if you're constantly succeeding, I guess you could say, and so that willingness to fail and that willingness to get back up after failure is, yeah, that tenacity is really important.

#### Tony

You all are a group of curious folks with call out bubbles above your head that are very willing to fail up. It sounds like.

## Emily

Yes, definitely. The exclamation point and the question marks, it just changes between those two every time. Yeah.

#### Tony

Amazing. So last question for me. I've got to ask, right. You're obviously brilliant and I think you can do anything in the world that you want to do, and you can do that anywhere that you want to do it. So why Disney?

# **Emily**

Good question. I of course, as I said before, I'm very passionate about the Walt Disney Company and the stories that we tell. But one of the reasons why I'm very passionate about working for Disney specifically is because of the joy that is arguably a happy side product. But isn't it so nice and so convenient that we get to make joy for a living? And that's why I like to work at Disney, because that's where I want to spend my time.

## Tony

That's beautiful. I've heard us talk about making magic, but I think maybe this is the first time I've heard of someone mentioned that we make joy, and how amazing that you get to do that all day. Every day.

## **Emily**

That's where I get to spend all of my time. And that's where I want to spend all my time.

## Tony

Awesome. Yeah. I don't know if my badge gets me into the door so I can spend some of my time there, too, but I will give it a try next time I am around.

## **Emily**

Well, if you ever want a tour, let me know that.

## Tony

Makes note. Emily, thank you for so many things. Not only the promise of a tour, but for your time and hearing your journey with us and helping us understand more about the Imagineering world and what's to come right and how you got there. Right. Hopefully other folks that are hearing this are also inspired to say like, hey, I am not only curious, but I am tenacious, right? I'm willing to fail up and I'm willing to tell stories, and I want to tell stories that make folks joyful right. Hopefully you'll continue inspiring folks around the world, whoever hears this, GHC, wherever we might be. And so, thank you again for your time, and hopefully we get a chance to chat again soon.

#### Emily

Awesome. Thank you so much, Tony.

#### Tony

Remember to subscribe to our show on Apple Podcasts, Spotify or wherever you listen to podcasts. While you're there, show us some love for your favorite podcast by leaving a review.

#### Ashley

Thank you again for listening to Life at Disney. We have had some amazing guests on the show and can't wait to talk to more of our cast members, crew, Imagineers and employees' next season.

#### Tony

I couldn't agree more, Ashley. There's no shortage of opportunity here. When you're ready for a new adventure, there's always one waiting for you as long as you're ready to discovery, so start exploring.

# Tony

This episode was produced by Christine Torres and Jaron Kaufman, with contributions from Kathy Fore, Nolan Jacobs, and Sarah Monnier. Editing was done by Claudia Benfield and Luis Vega. Music arranged and produced by Nat Young Music Group Inc. Design and Graphics by Kathy Collins and Luis Vega. And a special thank you goes out to the Walt Disney Imagineering External Communications Team and Kevin Rafferty.