Liz: THIS is the Penny Forward podcast. And, for this week's episode, not only is it the Penny Forward podcast, but it is also a collaborative effort, in terms of a podcast episode, with Unmute. More on that momentarily. This is the Penny Forward podcast, which is a show about blind people building bright futures one penny at a time. I'm Liz Bottner.

Chris: I'm Chris Peterson.

Michael: I'm Michael Babcock.

Chris: I'm Chris Cooke.

Michelle: I'm Michelle Pioki.

Patrick: And I'm Patrick Andrada.

Liz: And today, we are all here to talk about the California State University at Northridge, or CSUN, Assistive Technology conference, which, this year, in 2025, was the fortieth year of the conference. And the angle from which we will be speaking about the conference is related to new and affordable technology that was debuted at the conference this year. Full disclosure, some of the devices that we speak about may not be considered quote unquote "new," but they are still relevant for the conversation. So, I will turn it over to Michelle to give us a little bit of an introduction about the CSUN conference. Michelle?

Michelle: Sure. Yeah. So this was actually, um, our first time attending the CSUN conference, so we got to see this conference with new eyes. We experienced all five days of this conference. It took place in March of this year. It has seminars, it has an exhibit hall, it has networking events, and also ways to navigate through the conference with way finding, so it was a really exciting experience for us to get to experience over thirty different seminars that we attended even though there, I think there's over a hundred, and get one on one interaction with those exhibiters, and their representatives, so it was a very, very enlightening experience for us.

Chris: Did anyone on the call use any of the way finding technology that was available there?

Michael: This is Michael. So, attending CSUN this year was my second year attending it. Last year, in 2024, I tried the Goodmaps application, and it was okay. I found it to be challenging at times, especially when, uh, there was a lot of interruption in what the camera was focused on and what it was, was using. This year, I found it to be a lot more consistent, a lot more reliable, and I used it, I think, more than I used Aira at the conference, which is saying a lot, because I used Aira quite a bit last year. Uh, one of the biggest things that I found, and this is a little thing, but it's a huge thing as well. Is, the, the hotel is huge. So if you're downstairs, and, uh, you, need to use the restroom for say, um, I, you don't want to have to go mess with the elevators to go back up to your room, which is typically what I do when I'm in a hotel, to use the restroom. Uh, I was able to just use the Goodmaps, quickly find the nearest one, and it led me right there and it was, it was kind of enl-- it, I enjoyed it. Now I did hear from others that they did not have such a good experience, but for me, it worked pretty well.

Liz: Michelle, you mentioned exhibits, and, and exhibiters, uh, let's start talking about things that we may have seen at the exhibit hall that are new and affordable tech, that, that came out of this year's conference. Patrick, would you like to start us off?

Patrick: Yeah. Happily. So, one of the items that I saw that really made me very excited for the future of, particularly wearable technology was the Echo Vision by Agiga, um, A G I G A. It's really just a pair of smart glasses, and one could compare it to what the Meta glasses do in a way, um, and when I spoke with them, it was very apparent that they, whereas, Meta hasn't done as much within universal design to make the device, the Meta glasses themselves, completely accessible for users within the low vision and blindness community, although there's features that really can help benefit those that are within that community, for example, like even to pair the device, there's a blinking light, that comes on the Meta glasses. And if you can't tell if the blinking light is there, how do you know if it's ready to be paired? Just little things like that, and so, uh, there, I could tell immediately that this company has really put a lot of focus and effort into working with the community to make sure that the device, the smart glasses, that they're making are going to be a device for anyone who's low vision or blind, depending on what they're looking for. It was really great to see it in action in terms of being in the expo, the exhibit hall, because it,, provide live AI assistance, whereas with most scenic description products right now, um, with AI, it's point, capture, and listen. Whereas this was kind of, almost like with Seeing AI the live reading mode, except it was not just doing reading, it was doing scene description in addition to reading. And so, as I was maneuvering myself to look at other booths, uh, it was reading those booth names and describing them, and also giving me an idea about the layout around me. So, I believe it could be a really great device for those that are looking for greater independence, could possibly be paired with orientation and mobility skill work even, so we've talked with our O and M instructor about it as well. It, it's really great in terms of it just constantly reading that text aloud and giving that live feedback that a lot of people are looking for, without having to hold their phone up and out, and maybe be a little unsafe with that in mind. So yeah. It's pretty much doing everything that the Meta glasses currently do, uh, when it comes out. It's for preorder right now, I should say, and it will be pairing with things like Aira, and Be My Eyes, as well as allow users to be able to chat with those like through Facetime for example, so that they could even just call a family friend, if they wanted that, for orienting themselves in a particular situation where they might have used Aira instead. So, that was really exciting. And what's really interesting about this product is since it's a new product that's coming soon, it's available for pre-order right now for I believe about four hundred forty-nine, and, the extra tidbit here is, it will have a monthly subscription fee. And so this is kind of where the market's going that we've come to gather, where devices in terms of their hardware are going down in price, because the devices are maybe getting smaller, maybe they're now just a pair of glasses that can be, uh, manufactured for less cost than what the portable magnifiers cost, because they could market the glasses for other purposes, for not just our community itself. So, what that means is like, the extensive part of what really costs the money for them to be able to have this product and maintain it for the users is the software of it, and so that's where I feel like users are going to be ending up coming across more products in the future that are requiring subscription fees, to maintain the product, and, uh, receiving them at the, uh, at the get go, at a lower cost, but keeping in mind the subscription fee for your use in the future. There's pros and cons to that model, um, but it's really gonna be interesting to see how this could play out in a wearable device that is in, respectively to compare it to other devices, lower in cost, and could do a lot for individuals that are blind and low vision.

Chris: Have they talked any about when their target date is for having this on the market, and also, did they mention what the subscription fee is gonna be?

Patrick: They are planning for the summer at the moment. Now, we all know how timelines can go, especially with the way markets are trending right now. Um, there's definitely uncertainty in terms of how much, I believe like products can be made, especially knowing that this is actually a Chinese company, there may be a little uncertainty with that. They do have a base in the U.S. So, although they are all engineers in the U.S. that are from China, and, kind of, I believe got, are just, working together from their knowledge of being in the tech community all together. And so, that's where I also think the subscriptions are coming in. They haven't even released how much the subscription fee would be. My guess is it can't be anywhere no more than thirty dollars. At that point, you're probably paying an additional amount because AI doesn't cost, like, just based on the fact that, like Chat GBT costs mostly around twenty to twenty-five dollars a month for monthly subscriptions, it shouldn't be any more than that in my belief. However I can't speak to that since I'm not them. But I am in discussions with them about how they can bring this to market, so that it is able to be shown across many places, like within our low vision clinics, and also, assist them in being able to get it out to those who would really benefit. Um, and even talk with it about, people like state counselors and such.

Liz: Thanks, Patrick. And those prices that you mention, they are in U.S. dollars, correct?

Patrick: That is correct.

Liz: Okay. Just for listeners, I wanted to clarify that. Uh, Chris Cooke, I would like to pass it to you. What are you, what do you have for us to talk about?

Chris: Thank you. I absolutely had a wonderful time at CSUN, and one of my favorite products there is the Braille Doodle, and I got to meet the inventor and founder of the company, and that was really exciting to be able to tell him that it's already making an immediate impact on the students that I teach, who are adult learners of braille. And, if anyone doesn't know what the Braille Doodle is, I'm gonna describe it really quick, but I want to say that Daniel Lubiner, the inventor of the product, has been a special education teacher for the last twenty-five years. And for the last five years, he taught blind and low vision students in the Bronk’s, and when the pandemic hit, he was absolutely crushed, because then it was hard to teach braille. Students weren't learning braille, and he found out that only ten percent of the students that he was teaching were actually learning braille in the first place. And so, he wanted to find a way of giving students an immediate tactile experience of learning the braille code. So he developed this. It looks like a tablet. It's been called in my circles like an echosketch for the blind, so it's really cool. It has two sides that are operational, and the first side gives you a chance to practice your alphabet. There is one cell that cannot be changed because it is the letter that you want to produce when you're writing your alphabet in, in order, and then the next cell is a chance for the student to actually put this stylus in a hole, and when you draw the little magnetic stylus up, it brings up a little ball bearing. And so, what you're doing is you're placing the little stylus in the holes, and drawing up the little ball bearings, and you have this awesome braille, little braille ball bearings, of course, it's, it's maybe the size of jumbo braille or so, but then that's great for everybody's fingers, whether they're little fingers learning or adult fingers learning. And so, then, the student can practice writing some sentence at the bottom, and then you can turn it over, and then, it's really a free for all. It's a drawing surface, and you can draw, you know, basically line drawings, if you can imagine, whatever you can do with a right angle. And um, then, there are stencils you can place over the top that fit into grooves, so the stencils allow you to, um, make graphs, or operate within an, uh, braille cell, and you can draw pictures with the stencils that are provided. And what's really great, I was thinking about "necessity is the mother of invention," and, really thinking about, a teacher had a, a problem. He saw a need, and he developed it with the community in mind. And that's what we've been speaking about so far is, somebody just didn't think we needed something and offer to, uh, create a product for a problem that didn't exist. Someone has created a product that will really move students of all ages forward in learning their braille, whether it's beginning braille, or graphs, um, you know, STEM learning, that sort of thing. And so, I loved that I could meet this man, and tell him how much my adult students are enjoying the tactile experience of using this stylus to write braille, forwards. Um, some of us old timers writing braille backwards on the slate and stylus kind of chagrin that whole learning experience, so now we get to write braille forwards. And this is an affordable product, I believe, and it's from the Touch Pad Pro Foundation. It's 149. You can buy it from distributors like AT Guys, and others, and, um, it's just really great, and we've bought several for the agency where I work, and adults have been loving it. So, that was my favorite product to see.

Chris Peterson: And, we have that product in the Penny Forward My Tools for Living shop, by the way.

Chris Cooke: Awesome.

Liz: We do. And for the sake of the rest of this episode, all of the prices that are mentioned will be in U.S. dollars. Michelle, I would like to pass it to you.

Michelle: Yeah. So, I really had a great experience with a new product that's, it's not necessarily a product that's coming out for general consumption at this time, and it's more for interactive sporting, so it is called One Court. This is a live sports accessible sort of tablet essentially, that is going to be mostly in stadium, so for live events, uh, like NBA games, or baseball games, um, things of that sort of sort. And it essentially is a sort of platform, it's about the size of a laptop in width, and it will have the raised lines of the field, or the, the court, on this sort of platform, and giving live haptic feedback of the game that you are watching. So, any time the, sort of touch points a lot of people have with sporting events and things is that there's not a lot of detail a lot of the times, like radio becomes the sort of best option in terms of audio description for, for different sporting events, but it's not giving you that, sort of in game feel of where the players are necessarily, or how the ball is moving throughout the game. Um, so essentially, through live data, uh, real time data, they're converting incredibly quickly. I think they said the lag is under a second, in terms of how quick the data that comes into these sporting events can then be relayed into this haptic platform, that users can just have their hands resting on to feel the court, and, um, you know, like, for baseball, there's the baseball field in your left hand, and then there's the strike zone in your right hand. And so any time a ball comes through, you can feel where that strike came through, and then you can also feel if a, if it was hit. And you can feel the, the haptic raise of where that ball gets hit and how the players are moving, essentially, all through your hands, which is very, very cool. This isn't a product that's out for fans right now. It, they are partnered with, as of right now, four MBA teams. When, this was at the conference, they were saying they're already expanding. That you can go to guest services, and actually get the device for live in game interaction. Um, they are, in the future, expanding to a whole variety of sports, soccer, baseball, basketball, um, hockey, all of those, and they'll have interchangeable mats for those different games, and then, you essentially, the one thing I wasn't entirely sure of of how to connect with that game directly, but that's where again, they're currently in stadium as of right now. But they're working on a home version, that eventually, users will be able to watch games at home through the, through the platform as well. Um, so I thought that was a really cool up and coming device that I think people should keep their, their ears open for more information on, as it continues to grow and they continue to expand, and maybe look in your home town and call the guest services if you're going to a game, and see if it's available.

Liz: Awesome. Thank you, Michelle. And I have seen that, not necessarily this past year at CSUN, but I have seen it, uh, I believe last year at CSUN when I attended, and was definitely interested in the concept, and I thought it was just a, a pretty amazing thing to, to kind of even consider and experience. Last but not least, Michael. What do you have for us?

Michael: So, I got to put my hands on a device that, uh, should be coming in at about 350 U.S, and that is the Orbit player. When Vanken Tash at Orbit Research put it in my hand, my first thought was, "Huh. I could slip this into my pocket really easily." Not with the intention to walk off, but, thinking about it as a consumer, and, and realizing that this is very light weight, it has a smooth surface on it, the buttons were well established, you could easily feel where those buttons were. It reminded me a lot of other players in that range, but the thing about Orbit is, their objective is to bring prices down on access technology. Uh, so, my mind went to, uh, Victor from Humanware, or, uh, Sense Player from Selvas. And, uh, when I felt the Orbit Reader, I'm like, "This feels very similar to those devices with the button lay-outs. It didn't feel like it was cheaply made, it, it, I was very confident with, uh, using it. It charged USB C, so it had modern charging technology, and I believe the battery was removeable, I could be wrong on that. And it allows users to quickly access books, both from online libraries, or that you've added to the player itself. So, for me it would be the Orbit Research Orbit Reader. And that, I believe is supposed to be released this summer as well.

Liz: Awesome. The Orbit Reader, or the ... is that ...

Michael: Uh, I'm sorry, the Orbit Player.

Liz: Okay. I mean the Orbit Reader is a product, right?

Michael: Yes. Yes.

Liz: Okay.

Michael: Yes. Yes. The ...

Liz: By Orbit Research.

Michael: For those who don't know, the Orbit Reader, uh, they come in twenty or forty-cell displays. Uh, those have been around for several years now, but the, specifically the one that I was talking about is the Orbit Player. Um, they do also have the Orbit Speak. I believe the difference in the two devices, and I have not put hands on the Orbit Speak myself, and someone else might know more about the differences, but I believe the player itself is just for playing content, and the Orbit Speak will allow you to do other functions, such as taking notes down, and uh, doing calculations as well.

Liz: And is there anything from any of you that you haven't touched on, and would like to make our listeners aware of, before we close out?

Patrick: I definitely have quite a few things to share. So much was fantastic at the conference. I want to touch quickly on the Glidance for people to stay knowledgeable about. This is basically a an, an intelligent, AI driven robotic type of cane, that has two large wheels, as well as a small base in the middle, and cameras on the handle, and so a handle that comes up from the base at the bottom. The Chicago Lighthouse actually recently had hosted them for a demo day where we had about fifty people be able to trial their device and give them really great feedback, uh, as they move into creating their final prototype for their "frontier program," I believe is what they have called, for all of their preorders. So, the Chicago Lighthouse will be receiving one of those preorders. Um, it's gonna be a great device because, although to me, it is so cute, it looks like one of those child's toys that was like the Fisher Price little buggy type thing where when you push it, the bubbles pop up like popcorn in the middle, (chuckle.) Um, but, you're able to have it describe your surroundings with active scene description, have it help you guide safely to your destinations, have it locate doors, elevators, stairs, um, as well as, uh, intelligently navigate around obstacles and hazards. And so, I think there's a lot that it's going to be capable of, and as it improves itself for its final versions. They are done taking preorders for now, but when it comes out this fall, it will be about fifteen hundred, and that is another device that I believe it's having a subscription fee along with it. So, stay tuned for that, and, uh, last but not least, there's, 'cause Sony Cameras. I was really impressed. I, also just really impressed with their employees there, because they seem to have a really good understanding of what the community needs and deserves, especially because, although cameras are such a visual thing, like it doesn't mean everyone should be limited. So, just looking at their Sony Retina Projection camera kit, which is I believe about six hundred dollars, and that's supposed to be able to help individuals with their, uh, use the view finder, because it uses a Lazer retinal projection technology to project the digital image from the camera directly to the retina. So, offering people with low vision a newer, like sharper way to view, as well as photograph, and so, again, that's about six hundred, but then there's the Sony Alpha camera line, which is, um, making things way more accessible with screen reader functioning, enlarging of the screen as well, as well as AI based, uh, recognition of auto focus, where you can have it autofocus on things. Perhaps you're shooting a flower and notice there's a bee. Or it, or it can recognize that there's a bee and so you can ask it to focus on the bee. Uh, whereas you might not have the visual acuity to be able to make that focus perfect. Uh, it can do that for you.

Liz: Awesome. Thank you, Patrick. Chris Cooke, Michael, or Michelle, do you have anything to add, and then lastly, uh, if people have questions, or might want to contact you to find out more about any of the devices that you have mentioned, if you're comfortable, can they do that, and if so, how can they do that?

Michael: This is Michael. I can't think of anything else that hasn't already been mentioned. Definitely, if you get an opportunity to check out CSUN, and you get to come, it's a great chance to learn, and put hands on, technology that you may have heard about, and been curious about, but maybe weren't able to pick up, or it's out of your reach, or you want to learn more about what's coming up, and again, try those things out. If people want to reach out to me, uh, the best way is to, reach out to me on Mastodon. Payown, P a Y O W N, at dragons cave dot space, that's D R A G O N S C A V E dot space, and uh, you can check out Unmute Presents in your favorite podcast app.

Liz: And this is Liz. One thing I would like to mention too about just the CSUN experience, at least at time of recording, and time of current times that we're living in, the exhibiter experience, in terms of the expo pass that you can get at CSUN, that is at no cost, talking about affordable things, that's very affordable, right? Okay. (Laugh.)

Michael: I'm glad you brought that up, Chris. I have a friend who went, and he just attended the exhibiter hall, and he stayed at a hotel that was six hundred feet away from the front door of where the exhibit is, and the hotel there this year was 222 plus tax a night, and he was paying 162 plus tax per night. So also look around and see what's available to save a little bit of money too.

Liz: Wow. Awesome. You're welcome.

Michelle: This is Michelle. Uh, I just wanted to also bring up, uh, another device we saw. It is a little bit more on the, the cost side, but there's another new wearable coming out for TV connect streaming called Maggyvision. Actually I believe it's out, they're just enhancing some of the additional features and things. This one is connected with an iPhone, an iPhone 16 pro. I think Iris Vision has used a Google Pixel, and some other devices, so this is the first iPhone, um, one that we've seen with TV connect streaming, and they've gotten the lag down to, I believe almost instantaneous with whatever device. A lot of the times compatibility with other wearables, when they're streaming direct into a head set, tends to have a, a two or three second lag, and Maggyvision has figured out how to get that lag incredibly small, if not nonexistent. It has magnification, color contrast, it has a pupillary distance wheel, if you do have your own existing iPhone 16 pro, you can use your own device with it, but you can also purchase the device through Maggyvision. When you purchase it with the iPhone, I believe it's about thirty-five hundred, and if you have your own device, then it's about twenty-five hundred. The streaming device to connect to the TV is an additional nine hundred dollars, but it does come with almost fifty foot range, as well. There is a little bit of fees and things associated with it, so we're, we're still getting some, some bearings on that, um, but very excited to try a new, new wearable as well.

Liz: Awesome. And I just wanted to back up a little bit. For any of, related to Michael providing contact information, for any of our listeners who may not be on Mastodon, but would like to get a hold of, of Michael, feel free to email Penny Forward at

pennyforward@pennyforward.com

and we can facilitate, uh, connection. Uh, so, I just, and, so Michelle, I, I, did you have contact information that you would like to relay?

Michelle: Yes. Of course. Thank you. Um, so, um, you can actually connect with us directly, either we do have our My Tools for Living site, um,

mytoolsforliving.com

our direct phone number at, uh, our Tools for Living store, where both Patrick and I, um, are assistive technologists. Um, it's 800-919-3375, or you can E-mail our store directly at

store@chicagolighthouse.org

Liz: Thank you. Chris Cooke, do you have any final thoughts that you would like to add?

Chris: No, I think this is great. It's good to hear the whole gamut of all the devices, and it's just, it's awesome all the new technology that's coming out.

Chris: Before we go, like to thank our sponsors and valued partners, Thrivent, Wells Fargo, the Nasdaq Foundation, the APH Connect Center, and of course, Computers for the Blind as well. And World Services for the Blind. We can't, uh, can't forget them either. They are always, always willing to help us out. And, uh, thank you to Patrick and Michelle from the Chicago Lighthouse, Michael and Chris from Unmute, and Liz, from Penny Forward and Unmute, for helping to put this all together. Really amazing stuff.

Liz: As I always say, it takes a village.

Chris: The Penny Forward Podcast is produced by Chris Peterson and Liz Bottner, with audio editing and post production by Brynn Lowden, I got her name right this time. Text transcription is provided by Anne Verduin, and the music is composed and performed by Andre Louis. All of those people, by the way, are blind. Penny Forward is a nonprofit organization that provides accessible education and counseling to the blind community. Learn more about what we offer at

www.pennyforward.com

Now, for all of us in the Penny Forward and Unmute Communities, and the Chicago Lighthouse, I'm Chris Peterson.

Liz: I'm Liz Bottner.

Patrick: I'm Patrick Andrata.

Michael: I'm Michael Babcock.

Chris: I'm Chris Cooke.

Michelle: And I'm Michelle Pioki.

Chris: Thanks for listening, and have a great week. And I think it would be absolutely hilarious if we had the Sixty Minutes sound at the end, of ...

(Clock ticking begins.)

Chris: That episode, because ...

(Michael laughs.)

Liz: Yes.

(A few more seconds of clock ticking.)