



The NEAT Podcast, Episode Three

Adam

Welcome to the NEAT Podcast! Today we will speak with the NEAT Center's Smart Technology Specialist, Kris Thompson. Stay tuned as he discusses the Smart Home on Wheels and how it's making an impact for seniors and people with disabilities. And now here is the host of the NEAT Podcast, Steve Famiglietti!

Steve

Hello, everyone. And welcome to the third NEAT Podcast. I hope everybody is wonderful and well. We have a great show planned for you today. We have a fantastic guest, who actually is one of our producers. His name is Kris Thompson. And he is part of the NEAT team. Hello, Kris.

Kris

Hey Steve, it's great to be here.

Steve

So Kris, it's so good that you're here today. And I'm wondering if you can tell the listeners about your role at NEAT.

Kris

I am the smart technology specialist here at the NEAT Center. So kind of a little bit of history of my role here. Kind of when I started,

Steve

You didn't have an office.

Kris

No, I did not have an office, I was kind of floating around the NEAT Center.

See, I had when I first started here in NEAT, I had a number of roles. But my favorite was being involved in the we had a smart home demonstration room, which is actually where we do the podcast now. And I would demonstrate a lot of smart technology solutions. And we kind of got this program started through the vision of the Connecticut Tech Act Project. This technology, by the way, has only been in existence for like, four years or so. And, back then the Connecticut Tech Act Project kind of had the vision to see

how this technology was leveling the playing field for everyone of all abilities. And this technology's come a long way in four years. And it's even been a challenge for me to keep up with it over that time. But when I started here, I was kind of doing demonstrations and trying to get the latest smart technology in here throughout that smart technology boom over the four years that I was talking about. My position has evolved, along with the NEAT Center, the NEAT Center's over gone many changes since I've been here, but everything for the better. And it's been a fun, fantastic ride.

And so now, you know, the smart technology side of things here at NEAT has really taken off. And I am doing so many things with the smart technology program that it's very exciting. And it's making a big impact in people's lives. And I'm very, very glad to be a part of it.

Steve

That is awesome. And I know how busy you are because we share an office together. And I don't see you anymore because you're out and about every day.

Kris

That's very true. I am between Smart Home assessments, which we have launched that program, I guess it's been about two years now I've been going into people's homes and doing consultations. Making recommendations on the technology that based on my expertise, what I feel would be the best fit for them through feature matching, capitalizing on their abilities, and what they're looking to accomplish. So then I can also come back and do an installation, I can train them on the new technology. And it's been an amazing ride with that program. Getting to meet all the different people I've worked with everyone from seniors who are trying to age in place to individuals with MS or who are blind or losing their hearing.

There's been, you know, the just quite the array of people I've been able to work with. It's been interesting too, because with these assessments, one size never fits all. So even if it's two people who are blind or two people with MS, they always want to accomplish different things in different ways. And I always learn something new with every assessment I do. I also get to go and speak on this technology a lot. We have the Smart Home on Wheels, which we'll get into in a second.

We also, thanks to our partnership with AARP of Connecticut, have a lending library where people can try this smart technology out and kind of get a grasp of it.

I understand the learning curve involved with it because this technology is brand new. People don't realize what all it could do or how it works or how you interact with it. So we are able to put this technology in their hands for free to try for 30 days. And then they can you know, I've seen the impact of that to more people are likely to embrace this technology and implement it in their everyday lives and gain a lot more independence that way.

Steve

For the listeners out there, can you give us a definition of Smart Technology? What is it actually?

Kris

Great question. It's actually a question that comes up a lot. I usually forget to cover it, I just kind of dive right into demoing the stuff. So I do feel it's important that people understand what exactly is Smart

Technology, which is also they also consider it IoT, which stands for the Internet of Things. Smart Technology is basically any device that is connected on a network. Everything's becoming connected now. You've seen video doorbells...Even Amazon is making fun of themselves by putting Alexa and everything from light switches and bicycles. I mean, everything's getting connected. So Smart Technology refers to this technology that these devices that can communicate with each other. And it can help a person, you know, as quirky as a lot of it seems, for a person with a disability or someone who's aging and wants to live more independently can really help them age in place longer and live independently longer.

It also gives caregivers more independence and peace of mind that their loved ones are safe and able to control things on their own. So not only does it give new levels of independence, but you know, it can also help individuals stay socially connected as well, which is something we definitely take very seriously. I love helping people live more independently. But that social connection is crucial for overall health and well-being.

Steve

Absolutely, I mean, let's face it, if people are social, they're happy, they're more interactive. It's a good way to be.

We have been involved in a really exciting project here for the past year and a half, which is our Smart Home on Wheels or SHOW for short. And I would love if you could give our listeners an overview of the SHOW.

Kris

Absolutely, the SHOW which we call, it stands for the Smart Home on Wheels. This project kind of came about through it was a brainchild actually of Katie Hanley, our Senior Director of Oak Hill Centers.

All

Go Katie! Go, Katie!

Adam

Didn't kind of start out like a joke at first?

Steve

Well, we thought it was but it wasn't. *Laughter*

Kris

It was it was a wild idea!

To me, it definitely seemed like a wild idea. Because there were so many factors in it that I had never really seen done before and didn't really know how it was even possible to have a smart home in a parking lot. Because anyone who has a home with a network, you have to have

a network cable and everything has to be plugged in somehow. So in this has never been done like we're doing it where this is a mobile demonstration center that showcases smart technology for people with disabilities or seniors who, you know, we have to take accessibility in mind. And in a non-proprietary way where we are trying to showcase this one particular line of products, we're able to showcase the full gamut of technology that's available. So we actually submitted for a grant and got it through the Consumer Technology Association Foundation, and Katie's dream became a reality.

I'll kind of get to the point here, is it's a tiny home, which you may have seen on like HGTV. A tiny home, it's 24 feet long by 8 feet wide, 13 feet tall at the peak. And we have custom built it to showcase kind of the area that I typically work with when I do an assessment, which is basically a kitchen and a living area. And then we outfitted it with smart technology and have it powered and networked together so that it all works! We can give people the opportunity to be hands on, to see how this stuff can work and help people live more independently. We can spread awareness about this new technology and the potential it holds for everyone. And we can take it on the road and go to different places and show how empowering this technology can be.

All of our AT specialists contributed to the accessibility of the SHOW in one way or the other. A lot of the solutions that we've implemented and we showcase in there. Our access method station, which we can control things around the Smart Home on Wheels, or the SHOW, multiple ways. Through head movement, through eye gaze just by moving your eyes, you can control different aspects of the Smart Home. Switch scanning, basically you can control your tablet or smart device like a game show button, where you can put it near the knee or the elbow or the head and the tablet will scan through different commands, and then you can just nudge with your elbow. If you're nonverbal, can use your hands you can nudge with any part of your body and select the command and take control of your home environment. And what most people don't understand, and what I've seen, just giving someone like that the ability to control their lights for the first time in their life can completely change their lives. I've seen it happen, it's a powerful experience.

But back to the access methods we can control things with voice, we can utilize Siri, Google Home assistant, Alexa. Which Alexa is my favorite because you can utilize a lot more smart technology. And Alexa is compatible with a lot of other smart technologies, much more than the other two. But Alexa, you know, that being said, Alexa has a ton of capabilities too, whether the routine reminders keeping people on track with like calendar adherence.

So with Alexa there, you know, you have a lot of capabilities. But it's not always the right solution. Sometimes Alexa can't pick up what someone's saying, as well as Siri can. So you know, that's the importance of an assessment.

With the assessment we can, you know, if we decide to go with Siri, Siri is kind of incompatible with certain smart technology. So then we have to build the smart technology ecosystem around what Siri works with. All of this we can showcase in the SHOW. We showcase over 20 different manufacturers, we showcase the things that Siri are compatible with, the things that Alexa are compatible with, and the things that Google Home assistant are compatible with. And we also showcase traditional touch where if you just want to use your hand the touch on the tablet, you can control things around the home that way.

So as we were developing the Smart Home on Wheels, we gained a few partnerships with AARP of Connecticut who have been huge supporters of us and what we're doing and really on board with the mission to help seniors age in place as long as possible, as independently as possible. And to really get this technology out in front of the people who really need to see it. We have the wheelchair accessible ramp going into our Smart Home on Wheels thanks to support from Amramp. The Connecticut Tech Act Project, they have been huge supporters too, and all from the beginning, and they still continue to support us and what we do.

Also with this technology you can do for hundreds of dollars, what it costs thousands of dollars to do just a few years ago. And this technology can be purchased from any major retailer, if you go into Kohl's or Home Depot, Bed Bath and Beyond, everyone has their smart technology sections now. So it's really accessible, it's really affordable. Me, I'm a huge fan of universal design, and I really made it a huge part of the Smart Home of Wheels. And I love that these devices don't have this stigma to them. It's technology that everyone uses. And it's technology that really makes a big difference.

Steve

It is absolutely fascinating all of it. I can say for me, being in this field for 20 years and having a disability myself, seeing the evolution of the technology like this is heartwarming to me to see how all of this is so mainstream.

Kris

Absolutely, absolutely. A lot of times with assistive technology, it can come with a really big price tag. But if you get something like an iPad, which is a device that we showcase in the Smart Home on Wheels, an iPad holds so many capabilities. Within the built-in operating system of your iPad, you can enable so many accessibility settings to things like screen reading technology, magnifying, you can turn on visual cues if you're hearing impaired, you can download a lot of free apps to help with your accessibility. The iPad is one hugely powerful example of this amazing technology.

Adam

Kris, what is your favorite piece of smart technology?

Kris

I don't think there is any piece of smart technology that can do everything that an iPad can do, from an accessibility standpoint. And not only an accessibility standpoint, but also a social connection standpoint. Not only do you have the accessibility built in, and not only can you download the free apps to give accessibility, but you also have access to things like email, free texting, social media. And this can be hugely impactful for someone who lives alone to connect with the younger people in their family. Everyone kind of spreads out these days, so that social connection that an iPad can give without a bulky keyboard, monitor, mouse. it's such an easy interface too, because you just you hold the iPad and you touch it, or you use Siri and you speak to it. And you have all these apps that can benefit so many different people, whether they're hearing impaired, visually impaired, plus you can facilitate all the smart technology with it, you can install the apps, you can configure the apps.

the iPad, to me, there's nothing even close to the huge-I mean, like I said, even with Siri, you can use Siri to voice control your home. It's all built in to the iPad, they make a model that's 12.9 inches. It's great and big. It's awesome for seniors who to be able to hold and see it clearly, to magnify with it. I just, hands down, it's got to be the iPad. And I think a lot of us here, love the iPad. It's got to be in all of our top 10's because it's such a powerful piece of universal yet accessible technology.

Steve

That is true.

Adam

I have another question. So you went to a big conference in Vegas?

Kris

Yep.

Adam

Fairly recently. Right? So you kind of saw the future of smart technology. What are you most excited about, that's going to come down the road? Where do you see smart technology going? And what entices you about it the most?

Kris

I did have the amazing opportunity to go to CES, which is the big Consumer Electronics Show. They showcase so many you know, everyone's there from Alexa or Amazon, Philips, Samsung...some of the more impressive things I saw were-I like artificial intelligence, because I think it's going to provide an interface that's easy for the individuals I serve, to not have to always prompt. But it will be able to provide prompting. So instead of having to give a verbatim command... This type of interface where it prompts the individual. Also take away the reluctance to want to have to learn a new interface.

I think that one of the most impressive pieces of technology I've seen are these little-I think it's like the next generation of the Echo Show, the Echo Show is a version of Amazon Alexa that has a screen on it. It sits on a table top and prompt and say things like, "You just received a voice message or a text message from Cindy, would you like to respond?" "What would you like to say?" "Would you like to see the photo?" "Would you like to attach a photo?" "Would you like to record a sound file," it basically makes the interface so much easier, and they get prompted and these things can give telehealth capabilities. So that is a device that I'm really excited about that could be a game changer. With the way artificial intelligence can pick up algorithms pick up daily patterns, and if anything's wrong, it can notify a caregiver. They can make fall detection predictions to stop the falls before they happen. So that type of technology really blew my mind and made me excited for the future of smart technology.

Steve

Would you give our listeners some examples of some of the technology that is displayed in the SHOW?

Kris

Yeah, and just keep in mind too, that this technology is evolving rapidly. We want to continually change what we have in there. But, some examples some examples of what we currently showcase are the ring doorbell which a lot of people are already familiar with, that's a powerful piece of smart technology. Because you know someone who has mobility challenges, they don't have to physically move to their door, they can answer their doorbell a number of ways, whether it be through like a tablet or now you can do it through your Echo Show. And see and speak with those at your door without actually having to physically move to the door. Smart lights, we showcase Philips Hue lights which are amazing, because the ones we have change colors. They make two different kinds, one type is Philips Hue that are plain white, and then you can get the kind of change colors. And the reason I love the ones that change colors-because when I do an assessment for someone who is hearing impaired, it's a strategy we take to make everything that's in the home that's audible and make it visual. And when you have lights that can change colors, you can have the lights turn blue when someone rings the doorbell. Or, we can make the lights turn red when the smart smoke detects carbon monoxide. So you know that's an example of something we showcase in something we actually have set up to work that way. Smart switches which we work our fireplace with. It's a \$25 switch that we plug in, and you can plug a lamp into it, a fan, and have things automated too.

I don't think I mentioned automation. But that's huge for people to be able to have a hands-off approach. Things happen around them, you can consolidate tasks, and have tasks happen at certain times of the day. So, the thermostat temperature can change. The shades can go down, the door can lock. So that's you know, we showcase smart shades, smart door locks, smart thermostats.

We have two different Amazon Echo models in there, the Dot and the Show. Google Home Assistant we have the Google Home Hub in there. We also have Google Home Minis in our lending library that people can try. We have a smart microwave too, which has been really amazing for someone to be able to completely voice control their microwave through Alexa. So you could say Alexa, microwave for three minutes and 32 seconds and the microwave will go, BOOP! And it's that easy! You don't have to have you don't hunt, to try to feel around on the keypad, it's completely voice controlled. I mentioned the smart CO2 detector.

We can make things play off of each other. So if the ring doorbell has rang, then make the smart lights turn blue, or if smoke is detected, make the bed shaker shake, we could tie all these things in together and it consolidates tasks. So in our smart home, you can say "Alexa, good night" and the shades come down, the thermostat temperature changes, the fireplace turns off, the ceiling fan turns off, the lights turn off, the television turns off. We show how to control your television through all these access methods. You can retrofit any television, it doesn't even have to be a smart television. We can point you in the direction of the technology for less than \$100 that you can then have your television automated or controlled through all these different access methods. Which lighting and television control are two of the biggest requests I've had with my assessments.

Steve

When you first came to work at the NEAT Center, did you ever think you were going to be involved in something like the SHOW?

Kris

I come from working in the for-profit sector and then to come here, it was a really, truly a dream come true to me to be able to work for a nonprofit like this. Anyone who works here or who has worked with Katie over the last few years, know that you never know what the next year is going to hold. You never know what changes are going to take place. And it's been a fascinating journey. And I can't wait to see what next year holds.

We're trying to find ways to get smart technology into people's homes more easily, whether it be through the lending library, or hopefully getting grants that will cover smart assessments and installations. Whatever it takes to keep getting this technology out there and helping people live independently, which is what I do now. And I love it. It's not about independent living and empowering people.

Adam

What a great answer!

Steve

Thank you for listening to this podcast. We will see you again in a month or two.

Adam

For more information or to subscribe to our newsletter, please visit us at AssistiveTechnology.OakHillct.org or hit us up on twitter @TheNEATPodcast. Today's podcast was hosted by Steve Famiglietti and produced by Kris Thompson and Adam Kosakowski. Our theme music was composed by Andrew Pergiovanni. Tune in next month for another episode and thanks for listening!