



## Technology and Disability Policy Highlights – Winter Issue

NOVEMBER - DECEMBER 2020

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### OVERVIEW

The third of December was International Day of Persons with Disabilities (IDPD), and the United Nations themed the 2020 celebration "Building Back Better: Toward a Disability-Inclusive, Accessible, and Sustainable Post-COVID-19 World." The key messages for IDPD 2020 were health equity-focused and included among others: (1) "The COVID-19 pandemic provides a unique opportunity to build back better our health systems so that they are more inclusive and responsive to the needs and human rights of people experiencing disability in all their diversity." (2) "Countries need to shift towards a service delivery system rooted in the communities, reaching out and empowering people with disabilities."

In legislative news, the *EXTEND Act* [**HR 808**] was introduced in Congress in November of 2020. The *Act* aims to expand how states can utilize federal funding from the CARES Act, specifically, allowing states to invest in rural broadband connectivity. This legislation underscores the need to address accessibility to resources and daily life as the country has become unprecedentedly reliant on digital interactions.

In regulatory news, the Federal Communications Commission (FCC) released several Orders and proposed rules on various matters, including gift rule waivers for Rural Health Care (RHC) and E-Rate program members, fully automatic Internet Protocol Captioned Telephone Service (IP CTS), rural digital opportunity fund, and expansion of marketing opportunities for innovative technologies.

The Wireless RERC is seeking research participants with sensory disabilities from the Metro Atlanta area to participate in a study investigating the accessibility of various emergency alerting signals (audible, visual, tactile, and a combination of these) under everyday conditions and in their environments. If you are interested in participating, please contact Salimah LaForce at [salimah@cacp.gatech.edu](mailto:salimah@cacp.gatech.edu).

This newsletter also includes news about smart devices, wearables, robotics, augmented reality, virtual reality, mixed reality, digital accessibility guidelines, upcoming assistive technology conferences, and more.

## LEGISLATIVE ACTIVITIES

### **BILL AIMS TO USE CARE FUNDS FOR RURAL BROADBAND EXPANSION & IMPROVEMENT**

November 24, 2020 – Right before the Thanksgiving holiday, Congressman Robert Aderholt (R-Alabama) introduced H.R.808, the *Enabling Extra Time to Extend Network Deployment (EXTEND) Act*, allowing states to utilize CARES Act funding for expanding rural broadband infrastructure. Presently, the CARES Act dollars allocated to each state has limited and detailed uses. However, as digital connectivity has quickly become increasingly important, Congressman Aderholt's bill will allow federal dollars to be spent towards improving connectivity for teleworking, telemedicine, and virtual classrooms. According to Congressman Aderholt, this bill will "help those rural areas that have been left behind by providing a pathway for states to determine which areas are particularly underserved, while also preventing overbuilding in areas where broadband access is widespread." [Source: Brandon Moseley via Alabama Political Reporter]

#### ADDITIONAL INFORMATION:

[H.R.8808 - 116th Congress \(2019-2020\): EXTEND Act | Congress.gov | Library of Congress](#)  
[Aderholt introduces broadband-focused EXPAND Act](#)

<https://www.alreporter.com/2020/11/25/aderholt-introduces-broadband-focused-expand-act/>

## REGULATORY ACTIVITIES

### **GIFT WAIVER EXTENSION GRANTED TO BOLSTER COMMUNICATIONS AND TECHNOLOGY ACCESS**

December 14, 2020 – In an Order [**DA-20-1479**], the Wireline Competition Bureau (WCB) of the FCC extended the temporary waivers for gifts given to Rural Health Care (RHC) and E-Rate programs. The extension aims to aid rural healthcare providers and public entities such as schools and libraries who were affected by the COVID-19 pandemic. These gift rule waivers allow companies in the RHC and E-Rate programs to "to solicit or accept a gift or thing of value over \$20 from a service provider, and service providers are permitted to offer or provide applicants a gift or thing of value over \$20." Before these waivers, the gift rules prohibited these acts. In light of the ongoing COVID-19 pandemic's impact on communications and technology access, the WCB elected to extend these waivers until the end of the 2020 fiscal year, June 30, 2021. The WCB concluded that this extension is "warranted" because it allows service providers to continue offering and providing eligible RHC and E-Rate participants to solicit or accept "improved capacity, Wi-Fi hotspots, networking gear, or other things of value to assist health care providers, schools and libraries, as well as doctors and patients, teachers, students, school administrators, and librarians and patrons during this unprecedented national pandemic." [Source: FCC]

ADDITIONAL INFORMATION:

[WCB Extends Gift Rule Waivers for RHC and E-Rate Programs](#)

<https://www.fcc.gov/document/wcb-extends-gift-rule-waivers-rhc-and-e-rate-programs>

**INNOVATION RECEIVES CONDITIONAL APPROVAL FOR AUTOMATED CAPTIONING**

December 11, 2020 – The FCC's Consumer and Governmental Affairs Bureau released a Memorandum Opinion and Order [**CG Docket No.s 13-24 and 03-123**] approving conditional certification to InnoCaption to provide fully automatic Internet Protocol Captioned Telephone Service (IP CTS) for people with hearing disabilities using Automatic Speech Recognition (ASR). InnoCaption permits its consumers to use fully automatic telephone captions as an alternative to captions provided by communications assistants (CAs). IP CTS is a type of telecommunications relay service (TRS) that allows individuals with hearing disabilities to use a telephone and Internet-connected device that simultaneously listens and provides live captions of what is being said. InnoCaption also anticipates offering fully automatic IP CTS as an add-on ASR Calling Feature on their mobile application (app). This conditional certification indicates that InnoCaption's services will meet or exceed the Commission's minimum standards. [Source: FCC]

ADDITIONAL INFORMATION:

[InnoCaption Certified for Fully Automatic IP Captioned Phone Service](#)

<https://www.fcc.gov/document/innocaption-certified-fully-automatic-ip-captioned-phone-service-0>

**RURAL DIGITAL OPPORTUNITY AUCTION WILL INCREASE CONNECTIVITY FOR MILLIONS OF AMERICANS**

December 7, 2020 – The FCC published a Public Notice [**WC Docket 19-126; WC Docket No. 10-90**] providing an update on the Rural Digital Opportunity Fund Auction, which aims to expand broadband to the Commonwealth of the Northern Mariana Islands and 49 states. After the auction, the FCC found that over 5.2 million unserved homes would receive high-speed broadband due to funding allocated to bidders. The 5.2 million currently unserved homes account for 99% of the locations available in the auction. Furthermore, 99.7% of these unserved homes and businesses will have access to broadband with at least 100/20 Mbps. Over 85% of these locations will receive gigabit-speed broadband. The largest awardee, CCO Holdings, LLC (Charter Communications), will receive the most locations at approximately 1.05 million. In total, 180 bidders were allocated funding over the next ten years. "The auction unleashed robust price competition that resulted in more locations being awarded at less cost to Americans who pay into the Universal Service Fund. ...through vigorous competition among bidders, the final price tag to cover these locations is now

just over \$9 billion, with the vast majority of locations receiving gigabit broadband—far above the 25/3 Mbps minimum level of service that providers could bid on in the auction.” [Source: FCC]

#### ADDITIONAL INFORMATION:

[FCC Auction to Bring Broadband to Over 10 Million Rural Americans](https://www.fcc.gov/document/fcc-auction-bring-broadband-over-10-million-rural-americans)

<https://www.fcc.gov/document/fcc-auction-bring-broadband-over-10-million-rural-americans>

#### **OPPORTUNITY FOR LIMITED MARKETING TESTING OF WIRELESS PRODUCTS**

December 10, 2020 – The FCC issued a Notice of Proposed Rulemaking *In the Matter of Allowing Earlier Equipment Marketing and Importation Opportunities Petition to Expand Marketing Opportunities for Innovative Technologies* [FCC-20-180] seeking stakeholder input on proposed new regulations that would allow limited marketing and presale of common consumer devices such as cellphones, laptops, and Wi-Fi routers. The document reads, “The targeted enhancements to our equipment authorization rules we are proposing would leverage today’s fast-paced Internet-driven world to super-charge how the newest technologies and must-have devices reach consumers. As we once again examine our equipment authorization rules, our goal is to ensure they remain cost-effective and are properly tailored to a quickly-evolving marketplace.”

The NPRM suggests that this proposal would better prepare providers for device sale and distribution after undergoing the FCC's equipment authorization program. Under the radiofrequency device program, common consumer devices are rigorously tested to ensure they meet the FCC's technical standards, operate at appropriate power levels, and on the correct spectrum bands without interfering with other devices. Of particular note, though these devices will be eligible for presale, providers cannot begin distribution until a comprehensive inspection of the device is complete—several entities, including the Consumer Technology Association (CTA), provided comments. CTA specifically asserts that conditional sales to consumers would "permit manufacturers to gather more accurate information about consumers' intent to purchase[,] and that better supply-chain management will reduce waste in the raw materials used for a device as well as in the transportation and related energy expenditures and money to move devices over vast distances." In this Notice, the FCC does offer several questions for additional consideration from interested stakeholders, which include:

- The [FCC] seeks comment on the relative costs and benefits of their proposal to modify their marketing rule.
  - Can the benefits of allowing conditional sales of radiofrequency devices to be quantified in terms of cost savings to equipment developers and manufacturers?
  - How would this rule change affect devices' development time, and how long it takes to get new innovative devices to market?

- Should the FCC require manufacturers to include a label on device packaging, noting that it shall not be delivered to consumers before obtaining equipment authorization?
  - If so, how should the FCC implement this requirement as any such label would only have temporary applicability until equipment authorization is granted? What information should be included on the label?
- Should we require sellers to provide information on seeking a refund if the device does not receive authorization?
  - If so, how should this information be provided?
  - How would consumers receive notice that authorization was not granted and that the devices will not be delivered? What records of such notice are needed?

The FCC released this Notice for Proposed Rulemaking on December 10, 2020. Interested stakeholders must submit further comments within 30 days after the date of publication in the Federal Register. Any reply comments must be submitted within 45 days after publication date in the Federal Register. [Source: FCC]

#### ADDITIONAL INFORMATION:

[FCC Proposes Rules to Expedite Release of New Devices and Technologies](https://www.fcc.gov/document/fcc-proposes-rules-expedite-release-new-devices-and-technologies-0)

<https://www.fcc.gov/document/fcc-proposes-rules-expedite-release-new-devices-and-technologies-0>

## WIRELESS RERC NEWS

### METRO ATLANTA AREA RESEARCH PARTICIPANTS NEEDED FOR EMERGENCY ALERTING

#### RESEARCH

In research funded by the National Institute on Disability, Independent Living, and Rehabilitation Research, faculty at the Georgia Institute of Technology **are seeking participants for a usability study of prototype wireless emergency alert notification signals.** Because people with different types of disabilities aren't always considered in the design of alerting systems, this research seeks feedback from individuals who are blind, have low vision, who are deaf, or hard of hearing. **You will be asked to carry a device that produces alerts for a period of up to two weeks.** During this time, you will acknowledge any alerts you receive by pressing a button on the device. You will receive up to 14 alerts per week, and each alert will only be about 10 seconds long.

Research findings are expected to inform the development of technology and policy solutions that will improve the timely receipt of WEA messages by people with sensory disabilities.

**To be included, you *must*:**

- Be 18 years of age or older
- Be deaf, hard of hearing, blind, or have low vision
- Be able to speak and understand English and/or American Sign Language

**Each participant will receive a \$40 cash stipend.**

If you are interested in participating, please contact Salimah LaForce at [salimah@cacp.gatech.edu](mailto:salimah@cacp.gatech.edu) or 404-839-8741. She will provide more details about the study and schedule your participation.

**IF YOU HAVEN'T ALREADY, TAKE AND SHARE THE LATEST SURVEY OF USER NEEDS!**

The SUN is the Wireless RERC's cornerstone survey on wireless technology use by people with disabilities. This latest version has been updated in response to changes in technology. In addition to questions about cell phone and tablet use, this version of the SUN collects information about wearables, "smart" home technologies, and other next-generation wirelessly connected devices.

Your responses will:

- Help designers and engineers make more accessible wireless devices, features, and services for people with disabilities, and
- Inform recommendations to better ensure inclusive policies and practices.

If you have a disability, please consider taking this survey. If you know someone who has a disability, please send the survey to them.

**Take the survey online at <http://bit.ly/wRERC-SUN2020>, or**  
Scan the QR code to open the survey on your mobile device, or  
Take the survey via phone, call 404-839-8741.



**OTHER ITEMS OF INTEREST**

**TEXAS NONPROFIT RETROFITTING COMPUTERS FOR THE BLIND**

December 16, 2020 – Computers for the Blind (CFTB), a Richardson, Texas-based nonprofit, equips people with vision disabilities nationwide with accessible computers. CFTB receives donated computers and refurbishes them with customized accessibility software. The computers are often sold for less than a couple hundred dollars. Software available for installation includes JAWS, a screen reader, and ZoomText, a screen magnifier developed by Freedom Scientific. CFTB board member Bobby Lakey said, "Obviously, Windows has [products] built into it [...] It's kind of entry-level accessibility. And it has Narrator, which is getting better and better. And it will talk, but it still doesn't do the same things as if you add JAWS or ZoomText or Fusion to the situation."

Lakey himself has been blind since the age of 7. In college, Lakey originally wanted to focus on computer science at the University of North Texas but switched to a business program because of

a lack of accessibility in teaching computer science. Lakey does not want others to face the challenges he did. This year, CFTB sold more machines than ever in the nonprofit's history, likely spurred by COVID-19. Lakey said, "When CFTB founder Mr. Langford first started, he might have been selling 30-40 computers a year to individuals. This year and past years, we're up to in the neighborhood of 1,200 to 1,400 computers nationwide a year."

Computers for the Blind's computers are available to any person with a vision disability in the United States, and there are no income or age requirements. Grants may be available. The nonprofit also welcomes donations and volunteers. [Source: Spectrum News 1, Austin]

#### ADDITIONAL INFORMATION:

[Computers for the Blind: The North Texas Nonprofit Making Technology More Accessible](https://spectrumlocalnews.com/tx/dallas-fort-worth/news/2020/12/15/computers-for-the-blind--the-north-texas-nonprofit-making-technology-more-accessible)  
[https://spectrumlocalnews.com/tx/dallas-fort-worth/news/2020/12/15/computers-for-the-blind--the-north-texas-nonprofit-making-technology-more-accessible-](https://spectrumlocalnews.com/tx/dallas-fort-worth/news/2020/12/15/computers-for-the-blind--the-north-texas-nonprofit-making-technology-more-accessible)

#### **AZURE LIVE CAPTION DISPLAY FOR UNDERSTANDING SPEECH WITH MASKS ON**

December 16, 2020 – Jo Franchetti, a developer, built a wearable, live captions web app for her mother, who has hearing loss. Before the COVID-19 pandemic, her mother relied heavily on lip reading and clear pronunciation, which became increasingly challenging due to mask-wearing. Jo also found that phone-based assistive technology required that her mother look at her phone, which led to her being treated poorly by the person speaking to her. Inspiration struck when she saw a face mask with a wearable LED display inside -- she wanted to send the mask text from her phone's microphone, so it could display what she was saying.

Franchetti built a working demo using Azure Cognitive Services and Aply Realtime. She built a web app with HTML, CSS, and JS, which will run on a phone or computer with an internet connection and a microphone. After a prompt for microphone permissions, the app uses Cognitive Services Speech to transcribe audio speech into searchable text. This transcription is saved on the mobile phone and needs to be transferred to the LED display hardware to convert that text into lights. The app uses Aply Realtime to send messages from the app to the wearable hardware. Finally, Franchetti accounts for scrolling text, and her demo was ready to go.

While Franchetti's original dream was to work with a display that fits inside a mask, she worked with what was readily available. She showed the demo to her mother, who was overwhelmed by how well she could understand Franchetti in a mask and look at her while speaking. Franchetti has made her code open-source on Github and hopes that "someone will take this idea and run with it, because it could make a difference to so many people during this pandemic, and into the future." [Source: Jo Franchetti for Microsoft Azure, Medium]

#### ADDITIONAL INFORMATION:

[Making a wearable live caption display using Azure Cognitive Services and Ably Realtime](https://medium.com/microsoftazure/making-a-wearable-live-caption-display-using-azure-cognitive-services-and-ably-realtime-f4f6667a076f)  
<https://medium.com/microsoftazure/making-a-wearable-live-caption-display-using-azure-cognitive-services-and-ably-realtime-f4f6667a076f>

#### **ORCAM'S READING DEVICE WINS PRESTIGIOUS INNOVATION AWARD**

December 16, 2020 – OrCam, whose myEye device is covered in a subsequent entry, is an Israel-based startup that uses AIA.I.o to build devices for people with vision disabilities. Recently, the OrCam Read won the Best Innovation award in the "accessibility" category at CES 2021, one of the world's most influential technology competitions for design and engineering. The announcement was made ahead of the virtual event, which will take place January 11-14. OrCam Read aims to support people with print disabilities like dyslexia, mild to moderate vision loss, and reading fatigue. It is a pen-sized, handheld device that reads full pages or screens of text aloud from various surfaces, including newspapers, books, product labels, computers, and smartphones. It works offline without requiring an internet connection.

OrCam Read's AIA.I.lgorithms enable the point-and-click operation to read the entire highlighted text or target where to begin reading. The device's text-to-speech reading engine incorporates a new voice-activated assistant feature that uses advanced computer vision and natural language understanding (NLU) technologies to operate. Activated by the user's voice, the algorithm listens to the user's requests, retrieves relevant information, and reads the requested text to the user within a few seconds, OrCam said in a statement.

A year ago, the firm's device for hearing disabilities, the wearable OrCam Hear, received the CES 2020 "Best of Innovation" award for accessibility. According to Calcalist, a financial website, OrCam seeks to hold an initial public offering of shares in New York in 2021 to raise \$300 million at a \$3 billion valuation. [Source: Shoshanna Solomon, The Times of Israel]

#### ADDITIONAL INFORMATION:

[OrCam's AI-based reading device wins prestigious CES 2021 innovation award](https://www.timesofisrael.com/orcams-ai-based-reading-device-wins-prestigious-ces-2021-innovation-award/)  
<https://www.timesofisrael.com/orcams-ai-based-reading-device-wins-prestigious-ces-2021-innovation-award/>

#### **JAMAICA TO INCREASE ACCESS TO INTERNET FOR STUDENTS**

December 15, 2020 – The Jamaican government is implementing three major technology initiatives to increase access to the Internet for students living in rural and inner-city communities. Minister of Science, Energy, and Technology, Hon. Daryl Vaz said the Government would be making investments to transition the Public Broadcasting Corporation of Jamaica (PBCJ) to digital

transmission technology. Vaz said, "This decision is grounded in the fact that digital broadcast can reach over 85 percent of households who own a Smart TV set. Smart TV sets already have the ability to receive the digital signal without the addition of external devices." According to Vaz, Jamaicans who do not own a Smart TV will need an external digital set-top box to allow their existing television sets to receive the digital signals. These set-top boxes cost between \$2,500 and \$5,000.

The Government will also make investments to provide the PBCJ with access to high-speed fiber-optic communication to connect with rural cable television networks. "The National Works Agency (NWA) [is] working closely with the rural cable television operators to coordinate activities regarding the layout of the fiber-optic-cable infrastructure," said Vaz. So far, 18 out of 34 rural cable TV operators are using the fiber infrastructure to get content from the PBCJ. This new initiative seeks to connect the remaining rural cable TV operators to fiber infrastructure and enable students to access educational content.

Finally, the Government is working on expanding public Wi-Fi hotspots across the country rapidly. This is in recognition that providing all homes with internet access will take time, especially in rural areas. Vaz is now waiting for Parliament to finalize the list of locations suitable for public Wi-Fi installation. Since assuming responsibility for the portfolio, he has launched five public Wi-Fi hotspot locations under the Connect Jamaica Programme, bringing the total number of hotspots to 13. [Source: Latonya Linton, Jamaica Information Service]

#### ADDITIONAL INFORMATION:

[Major Technology Initiatives To Increase Access To Internet By Students In Rural Areas](https://jis.gov.jm/major-technology-initiatives-to-increase-access-to-internet-by-students-in-rural-areas/)

<https://jis.gov.jm/major-technology-initiatives-to-increase-access-to-internet-by-students-in-rural-areas/>

#### **LOOK TO SPEAK, AN EXPERIMENTAL GOOGLE APP**

December 8, 2020 – Google worked with speech and language therapist Richard Cave to develop "Look to Speak," an experimental Android app for people with speech and motor disabilities. The app aims to provide those who are non-verbal and require communication assistance with a way to express themselves. Look to Speak uses machine learning and eye-tracking technology -- subjects look left, right, or up to select from a list of phrases that their phone speaks aloud. The app can also be used to snooze the screen and edit a user's phrasebook. Some phrases include: "Hello," "Thank you," "Yes," and "No." Cave said in a blog post, "As mobile devices become more ubiquitous and powerful, with technologies like machine learning built right into them, I've thought about the ways phones can work alongside assistive technologies." Cave believes Look to Speak could be used as an extension to existing eye gazing technology. "We're not replacing all of this kind of

heavy-duty communication aid stuff because there's a lot of functionality in there. Look to Speak is for those important short messages where the other communication device can't go." [Source: Kim Lyons, The Verge]

**ADDITIONAL INFORMATION:**

[Google Look to Speak lets you use your eyes to select and speak phrases - The Verge](https://www.theverge.com/2020/12/8/22160011/google-look-to-speak-eye-tracking-android-disability)

<https://www.theverge.com/2020/12/8/22160011/google-look-to-speak-eye-tracking-android-disability>

**MOBILE DIGITAL ACCESSIBILITY GUIDELINES**

December 7, 2020 – GSMA, a London-based organization representing mobile network operators worldwide, released new digital inclusion guidelines called the "*Principles for driving the digital inclusion of persons with disabilities*." Pointing to World Health Organization research finding that out of one billion people with disabilities, only 10% have access to assistive technology. The GSMA developed the guidelines to encourage the mobile industry to close this gap. The guidelines outline three core principles: embracing disability inclusion at every level of an organization; understanding how to reach and serve people with disabilities; finally, delivering inclusive products and services. GSMA recommends improved data analyses and customer research to better understand customers' with disabilities pain points and needs. They also suggested developing mobile products that are affordable and accessible for all and training customer service agents in the use and delivery of such devices.

The guidelines have been supported by several key mobile operators and received funding from the U.K. government. Going forward, the goal is to have mobile operators and stakeholders endorse the guidelines to inspire a global effort towards inclusion in the entire mobile value chain. [Source: Clare McDonald, computerweekly.com]

**ADDITIONAL INFORMATION:**

[GSMA launches digital access guidelines to help disabled people](https://www.computerweekly.com/news/252493236/GSMA-launches-digital-access-guidelines-to-help-disabled-people)

<https://www.computerweekly.com/news/252493236/GSMA-launches-digital-access-guidelines-to-help-disabled-people>

**LIVERPOOL LIBRARY LAUNCHES ACCESSIBLE TECHNOLOGY SPACE**

December 4, 2020 – Liverpool City Library opened an accessible technology space to meet the demands of the one in five people in Liverpool who have some form of disability. The \$75,000 upgrade includes adjustable height tables for wheelchair use, two large touch screens with software for people with vision disabilities, high contrast keyboards with trackball mice, and a text magnifying

camera for people with vision disabilities to read magazines, newspapers, and other text. The work was partially funded through the State Library's Metropolitan Public Library Grants Program. Mayor Wendy Waller said, "It complements the Library's existing accessibility collection, which includes books in dyslexic font and a wide selection of books and DVDs on dyslexia, hearing impairments, vision impairments, autism and Asperger's, ADD and ADHD as well as other disabilities." [Source: Chris Boulous, Liverpool City Champion]

#### ADDITIONAL INFORMATION:

[New accessible technology provides 'greater flexibility'](https://www.liverpoolchampion.com.au/story/7040746/new-accessible-technology-provides-greater-flexibility/)

<https://www.liverpoolchampion.com.au/story/7040746/new-accessible-technology-provides-greater-flexibility/>

### **SPEECH TECH STARTUP MAKES ALEXA ACCESSIBLE FOR PEOPLE WITH DISABILITIES**

December 3, 2020 – [Voiceitt](https://www.voiceitt.com/), a Tel-Aviv based speech recognition company, announced the Voiceitt mobile app to interact with Amazon's Alexa. Voiceitt's mission is to use machine learning and speech recognition to help people with speech disabilities. Voiceitt built its speech recognition algorithms and expansive voice database by learning from people with atypical speech and has a network of partners across Israel, the United States, and Europe. The company's first commercial product was a mobile app that facilitates in-person communication for people with severe speech impairments. It is available in several languages for a wide variety of underlying conditions affecting speech.

During COVID-19, the company recognized the opportunity to facilitate in-person communication and interaction with voice-activated and controlled devices. For people with disabilities that impact their motor control, the ability to navigate their environment and control smart devices by voice increases independence and helps maintain social distancing practices. Thus, Voiceitt conducted a pilot with Inglis House, a long-term care wheelchair community for people with physical disabilities. The two worked closely to help participants with cerebral palsy and atypical speech. Subjects used Voiceitt and Alexa to perform daily tasks, such as control channels on their televisions or play music.

Danny Weissberg, CEO and co-founder of Voiceitt, said, "Integration of Voiceitt's speech recognition with a powerful service like Alexa further demonstrates Voiceitt's value proposition in a rapidly expanding industry, and of our vision – to make speech recognition accessible to everyone." Voiceitt participated in the Alexa Accelerator, powered by Techstars, in Seattle in 2018 and became an Amazon Alexa Fund portfolio company. Echoing Weissberg, Peter Korn, Director of Accessibility at Amazon Lab126, said, "We share the company's vision to help people with speech impairments live more independently through voice. We were delighted to support them through an Alexa Fund investment and now through an Alexa integration via their mobile app." Voiceitt provides its product to a limited number of customers through its Community Release, a program launched in

preparation for its commercial product launch in Q1 2021. To learn more about Voiceitt's Community Release, visit [www.voiceitt.com](http://www.voiceitt.com). [Source: Cision PR Newswire]

**ADDITIONAL INFORMATION:**

[Voiceitt makes Alexa accessible for people with disabilities](https://www.prnewswire.com/il/news-releases/voiceitt-makes-alexa-accessible-for-people-with-disabilities-301185816.html)

<https://www.prnewswire.com/il/news-releases/voiceitt-makes-alexa-accessible-for-people-with-disabilities-301185816.html>

**ANNUAL CELEBRATION OF INTERNATIONAL DAY OF PERSONS WITH DISABILITIES**

December 3, 2020 – This year marks the 28<sup>th</sup> commemoration of the International Day of Persons with Disabilities (IDPD). The United Nations themed the 2020 celebration "Building Back Better: Toward a Disability-Inclusive, Accessible, and Sustainable Post-COVID-19 World." The annual observance of this day began in 1992. On December 4th, a commemorative event was attended by representatives of UN offices, organizations, and advocates of people with disabilities, civil society, and the private sector. The event focused on important steps taken by vested stakeholders to "build back better" post-COVID world that is more disability-inclusive. The World Health Organization and United Nations Educational, Scientific, and Cultural Organization (UNESCO) celebrated IDPD by spreading awareness about improving disability inclusion in society. The IDPG web page contains campaign materials, disability statistics, and Key messages for IDPD 2020. They include (verbatim):

- Disability is part of the human experience.
- WHO recognizes that a world where all people attain the highest possible standard of health and well-being is only possible if health systems are inclusive of people with disabilities.
- People with disabilities have been amongst the most vulnerable populations during the current COVID-19 outbreak due to many health, social and environmental barriers, discriminatory attitudes, and inaccessible infrastructure.
- The COVID-19 pandemic provides a unique opportunity to build back better our health systems so that they are more inclusive and responsive to the needs and human rights of people experiencing disability in all their diversity.
- Countries need to shift towards a service delivery system rooted in the communities, reaching out and empowering people with disability.

[Sources: WHO and the UN]

**ADDITIONAL INFORMATION:**

[International Day of Persons with Disabilities 2020: A Day for All](https://www.who.int/campaigns/international-day-of-persons-with-disabilities/2020)

<https://www.who.int/campaigns/international-day-of-persons-with-disabilities/2020>

## International Day of Persons with Disabilities

<https://www.un.org/development/desa/disabilities/international-day-of-persons-with-disabilities-3-december.html>

### **ASSISTIVE TECHNOLOGY ASSESSMENT TOOL**

December 2, 2020 – The World Health Organization (WHO) developed the assistive technology capacity assessment (ATA-C) tool to evaluate a country's capacity to finance, regulate, procure, and provide assistive technology. The tool was developed in partnership with the Clinton Health Access Initiative and several in-country partners. ATA-C enables countries to identify key actions to improve access to assistive technology: awareness-raising, policy and program design, and monitoring and evaluation. Additionally, the implementation process, in itself, brings diverse stakeholders together for meaningful action.

WHO created the [ATA-C portal](#), which houses the ATA-C tool and supporting documents. Through this portal, WHO will provide technical support and facilitate coordination between diverse stakeholders in countries. The ATA-C is part of WHO's Assistive Technology Assessment (ATA) [Toolkit](#) to help countries collect useful and relevant data on assistive technology. The project was funded by the UK led Global Disability Innovation Hub and contributions from the United States Agency for International Development. [Source: BioSpectrum, Asia Edition]

#### ADDITIONAL INFORMATION:

[WHO launches assistive technology capacity assessment \(ATA-C\) tool in Indonesia and Vietnam](#)  
<https://www.biospectrumasia.com/news/104/17209/who-launches-assistive-technology-capacity-assessment-ata-c-tool-in-indonesia-and-vietnam.html>

### **STUDENTS BUILD MOBILE ACCESSORY FOR TYPING IN BRAILLE**

November 29, 2020 – Four students from the Indian Institute of Technology, Madras, developed "Cube," an assistive technology device for people with vision disabilities. The device connects via a smartphone's charging port or headphone jack. It helps users type, learn, and read braille content. It also assists users with navigation and recognizing people and objects. For added convenience, the assistive device can be folded to the phone's back using a flexible connector. The students, Sundar Raman P, Adil Mohammed K., Shivam Maheshwari, and Andrea Elizabeth Biju, built on an existing product for reading PDF files on mobile phones. Sundar said the main aim was to maximize the smartphone's capability, as most people carry one today. The device includes four refreshable braille cells (24 dots) on one side and a camera on the other. The refreshable braille cells project symbols that help in learning and typing on the smartphone in braille. The camera works with the smartphone camera to capture and process a wide field-of-view of the environment and gives the

user information about obstacles' proximity and nature through tactile braille cells. The team hopes that their innovation makes typing easier by decreasing dependence on slow audio feedback while typing. [Source: Ankita Singh, the Logical Indian]

**ADDITIONAL INFORMATION:**

[Students From IIT-M Design Handy Device For Typing In Braille](#)

<https://thelogicalindian.com/uplifting/students-design-device-for-visually-impaired-25133#.X8UML-Og2To.twitter>

**STANFORD NEUROSCIENTISTS LAUNCH WEARABLE FOR DEAF AND HARD OF HEARING**

November 23, 2020 – Developed by Dr. Eagleman and Dr. Novich, two neuroscientists from Stanford, Neosensory Buzz is a new wearable device that turns sounds into vibration patterns. It mimics the ear's cochlea by sending vibrations via the brain's nervous system, creating another sensory channel to the brain's auditory processing center. Traditional assistive hearing devices rely on amplification to deliver sound, but Buzz feeds the brain's auditory information directly through the skin. The technology focuses on sending data streams to the brain through the sense of touch, known as haptic feedback. Users describe wearing Buzz as a tri-modal hearing experience. Dr. Eagleman likens the senses to "plug and play" sensory devices. He says, "[Your brain] is fundamentally always trying to get information across the senses. Whatever information comes in, it just figures out what to do with it."

Neosensory plans to launch a new device specifically designed for high-frequency hearing loss in 2021 using the same hardware programmed with different algorithms. The technology will capture high-frequency sound units and turn them into very particular vibrations on a specific part of the wrist. Dr. Eagleman gives the example of age-related hearing loss. "With cross-sensory boosting, your ears still do most of the work, but the wristband tells you which [sound] was just said. It allows people to understand what's happening with speech in particular." Buzz debuted in March 2020 and is now sold worldwide. [Source: Debbie Clason, Healthy Hearing]

**ADDITIONAL INFORMATION:**

[New device helps hearing-impaired feel sounds in their environment](#)

<https://www.healthyhearing.com/report/53155-Buzz-device-routes-sound-through-skin>

**DISABILITIES CENTER LAUNCHED AT PUBLIC MALL TO PROMOTE INCLUSION**

November 16, 2020 – The Northeast Arc in Danvers, Massachusetts, a not-for-profit organization that helps children and adults with disabilities become full participants in the community, announced the creation of The Center for Linking Lives at the Liberty Tree Mall. The Center will serve individuals

throughout the North Shore. Services include support for families who have children diagnosed with autism or other intellectual disabilities, early intervention, residential and health services, supported employment, and assistive technology lending library, and skills training. It occupies highly visible space in the Liberty Tree Mall, allowing individuals with disabilities to become full participants in their communities through access to stores, restaurants, and potential jobs in the mall for both independence and inclusion.

Highlights of The Center for Linking Lives include an Adaptive Technology Lab to train individuals about the latest devices that assist with cognitive, physical, and emotional impairment. The Center also has a Test Kitchen to provide learning basic food preparation in a controlled setting, small meeting rooms that allow for one-on-one speech, cognitive therapies, mock interviews to prepare job seekers, and group program space for small recreational programming. The Center will also include "Parcels," 1,000 square-foot storefront offering products created by people with disabilities. Tim Brown, Director of Innovation and Strategy, Northeast Arc, said, "Rather than purchasing a separate building and perpetuating the physical separation of people with disabilities, our approach seeks to transform an otherwise unused former retail space into a vibrant center that meets the needs of the individuals we serve within an existing community hub." "By introducing the general public to the array of services provided by the Northeast Arc, the Center for Linking Lives will demonstrate first-hand what people with disabilities can achieve if allowed to succeed," says Jo Ann Simons, President & CEO. [Source: David Thomson via Patch]

#### ADDITIONAL INFORMATION:

[Northeast Arc Launches Center for Linking Lives](#)

<https://patch.com/massachusetts/danvers/northeast-arc-launches-center-linking-lives>

#### **CRAFTON HILLS COLLEGE OFFERS DISTANCE LEARNING SUPPORT**

November 16, 2020 – The Technology Success Center (TSC) at Crafton Hills College (CHC), California, is dedicated to creating pathways to meet students' learning needs. Since the campus closures due to the pandemic, the Center has served more than 500 students and worked with more than 100 faculty to expand accessibility and success in distance learning. Suzanne Delahanty, a specialist at CHC, says, "Going entirely remote provided us with the rare opportunity to quickly research and invest in promising virtual technology that will undoubtedly continue to support our college for years to come."

The Center offers expertise for students with disabilities, for whom supplemental technology for study, research, and note-taking helps make a difference in their success. Delahanty often shares resources like voice dictation, audio transcription, audio recording, speech-to-text, screen-readers, writing and reading aids, and smart-pen use to increase students' accessibility and opportunity for

success. She goes above and beyond to assist her students, manually scanning a textbook page by page and turning it into editable text for screen reader access. She helped another student with a severe disability find a "Tobi Dynavox," a device that allowed him to control a mouse with his retinas, which allowed him to continue pursuing his college dream.

Additionally, TSC offers support to faculty and staff in the form of on-demand, live support, recorded tutorials, group training sessions, and online resources. To support its work, TSC has received Distance Education and Captioning and Transcription grant funding of \$170,000, which will be used to provide broad captioning services to support all students. "Technology has been able to level the playing field, but it does have to have the human component," says Dehanty. "You have to have someone helping the students and getting them through it; [...] technology will never replace teachers." [Source: Liana Sowa via Broadband Breakfast]

#### ADDITIONAL INFORMATION:

[With Anniversary Awards, FCC Recognizes Role of Communications Technology for People With Disabilities](http://broadbandbreakfast.com/2020/10/with-anniversary-awards-fcc-recognizes-role-of-communications-technology-for-people-with-disabilities/)

<http://broadbandbreakfast.com/2020/10/with-anniversary-awards-fcc-recognizes-role-of-communications-technology-for-people-with-disabilities/>

#### **ASSISTIVE TECH INNOVATIONS AT GLOBAL GRAD SHOW**

November 13, 2020 – The online [Global Grad Show](#), which includes social impact innovations from graduates and universities worldwide, included several futuristic assistive technology innovations. In its 6th year, the show is designed to bring together the world's best academic minds to develop solutions for a better world and includes social impact projects in the fields of design, science, technology, and engineering. It showcased 100 pioneering designs, selected from 1,600 applications from 270 Universities in 60 countries – including Georgia Tech, Harvard, Imperial College London, and the Samsung Art and Design Institute.

Assistive technology submissions included the "Fail-safe Airbag Belt," a wearable airbag that detects and cushions falls. Designed by Colm Flynn from the University of Limerick, the belt uses sensors to identify when the wearer is about to fall, activating airbags to protect the hips from possible injury. Through fall detection system analysis, it identifies a fall and activates an airbag in 300 milliseconds. The technology designed for older people who are fall risks uses a simple design and is turned on whenever the belt buckle is closed. The second innovation, called SCALED, was designed to combat complex, lengthy, and costly rehabilitation, still leading to long-term immobility following injuries to joints. This occurs largely because existing protective and supportive wearables can reduce movement and muscle strength. A prosthetic cast that replicates a reptile's skin provides protection and rehabilitation without restricting movement.

The show aims to put graduates in touch with those who can assist with and fund their research. There is a £2 million 10-year fund to help exhibitors to bring their inventions to market. [Source: Sarah Sarsby via AT Today]

**ADDITIONAL INFORMATION:**

[Futuristic assistive tech innovations exhibited at interactive Global Grad Show](#)

<http://attoday.co.uk/futuristic-assistive-tech-innovations-exhibited-at-interactive-global-grad-show/>

**GRANT FOR ASSISTIVE TECHNOLOGY IN SCHOOL DISTRICTS, CONNECTICUT**

November 12, 2020 – In the state of Connecticut, the Department of Education recognized a critical need to provide students with appropriate assistive technology solutions. Thus, Connecticut's Neag Foundation, a local nonprofit, was awarded a \$250,000 grant recently to help Oak Hill, Connecticut's largest provider for people with disabilities, expand its support for students with disabilities across the state. The grant will expand Augmentative, and Alternative Communication (AAC) services, which gives children with communication challenges the tools they need to improve their learning, social skills, and independence. Barry Simon, President and CEO of Oak Hill, said, "There is a steady demand for our AAC services; however, our ability to meet this demand has been limited. This seed grant [...] will allow us to increase our capacity [...] throughout the state and train providers in how to access and utilize assistive technology."

During the COVID-19 pandemic, Oak Hill's New England Assistive Technology (NEAT) Center went from working with 63 school districts through this program to supporting all 175 school districts throughout the state. At the onset of the pandemic, significant new challenges emerged for students with disabilities and the families and teachers supporting them. Students had access to professionals like a paraprofessional or speech therapist at school but lacked this support at home. NEAT responded to the crisis, developing remote services that offered virtual support for students with disabilities and teachers. Talking about the impact these funds can have, Sally Reis, a trustee at the Neag Foundation, said, "Now, more than ever, given the era of social distancing, children with communication differences need the tools and resources to develop their connections with our world." [Source: Shoreline Citizen Community Contributor via Patch]

**ADDITIONAL INFORMATION:**

[Neag Grant Helps Oak Hill's NEAT Center Support Student Learning](#)

<https://patch.com/connecticut/across-ct/neag-grant-helps-oak-hills-neat-center-support-student-learning>

## **GOOGLE IMPROVES DEVICE SPEECH RECOGNITION**

November 11, 2020 – Voice assistive technologies enable users to employ voice commands to interact with their devices and rely on accurate speech recognition to ensure responsiveness to a specific user. However, in many real-world use cases, the input to such technologies often consists of overlapping speech, which poses great challenges to many speech recognition algorithms. In 2018, Google Research proposed a [VoiceFilter system](#), which personalized interaction with assistive technology by allowing people to [enroll their voices](#). In a recently published paper, the authors present an update to VoiceFilter for on-device use, called "VoiceFilter-Lite." They describe that while the VoiceFilter approach was highly effective, efficient streaming speech recognition involved device-related challenges such as model size, CPU, and memory limitations. The new [VoiceFilter-Lite](#) system has been carefully designed to fit on-device applications, with reduced runtime operations and a neural network model size of only 2.2 MB. Importantly, this model allows the user to access assistive voice features under extremely noisy conditions, even if an internet connection is unavailable. The authors' experiments show that a 2.2MB VoiceFilter-Lite model provides a 25.1% improvement to the word error rate (WER) on overlapping speech.

When speech separation models are used for improving speech recognition, two types of error occur; under-suppression, when the model fails to filter out noisy components from the signal; and over-suppression, when the model fails to preserve useful signal, resulting in some words being dropped from the recognized text. Over-suppression is especially problematic since modern speech recognition models are usually trained with extensively augmented data and are more robust to under-suppression. VoiceFilter-Lite addresses over-suppression with two novel approaches in its machine learning model: an asymmetric loss function during training and a prediction of the type of noise at runtime to adaptively adjust suppression strength according to this prediction. VoiceFilter-Lite is a plug-and-play model, which means that the speech recognition model and the VoiceFilter-Lite model can be separately trained and updated, largely reducing engineering complexity in the deployment process.

Currently, the model is English only, but going forward, the authors are excited about adopting the same technology to improve speech recognition for more languages. [Source: Quan Wang via Google AI Blog]

### **ADDITIONAL INFORMATION:**

[Improving On-Device Speech Recognition with VoiceFilter-Lite](#)

<https://ai.googleblog.com/2020/11/improving-on-device-speech-recognition.html>

## **ROBOTIC GRIPPER PICKS UP OBJECTS WITHOUT BREAKING THEM**

November 10, 2020 – UNSW Sydney engineers have developed a novel soft fabric robotic gripper that acts similar to an elephant's trunk to grip, pick up, and release objects without damaging them. According to the researchers, the multipurpose technology could be extensively used in industries that involve the handling of delicate objects and a personal assistive device. Dr. Thanh Nho Do, Scientia Lecturer and director of UNSW Medical Robotics Lab and leader of the group, stated, "Our new soft fabric gripper is thin, flat, lightweight and can grip and retrieve various objects—even from confined hollow spaces—for example, a pen inside a tube." The device also has an enhanced sensor that detects the grip strength required to prevent objects' damage during handling. Furthermore, the grip mechanism can change from flexible to stiff, enabling the device to grasp objects of various shapes and weights, up to 220 times heavier than the gripper's mass.

Animals and their natural gripping techniques inspired the device. According to Dr. Do, "Animals such as an elephant, python or octopus use the soft, continuum structures of their bodies to coil their grip around objects while increasing contact and stability – it's easy for them to explore, grasp and manipulate objects." Unlike their invention, many soft grippers are based on claws or human hand structures, making them unsuitable for gripping bulky or oddly shaped objects. Existing soft grippers also lack sensory feedback and adjustable stiffness, making them unusable with fragile objects or confined environments. UNSW's device reportedly overcomes these limitations, and can even hook through holes in objects to pick them up, for example, a mug. After testing and validating the new robotic gripper as a complete device, Dr. Do has filed a provisional patent for the technology. He believes that the robotic gripper will be available in the market in the next 12 to 16 months, provided he finds an industry partner. [Source: AZoRobotics]

### **ADDITIONAL INFORMATION:**

[New Robotic Gripper Picks Up, Releases Objects Without Breaking Them](https://www.azorobotics.com/News.aspx?newsID=11784)

<https://www.azorobotics.com/News.aspx?newsID=11784>

## **INCLUSIVE COMMUNITY DEVELOPMENT AWARDS FOR FOSTERING FINANCIAL INDEPENDENCE**

November 10, 2020 – The Center for Disability-Inclusive Community Development (CDICD), managed by National Disability Institute (NDI), announced the winners of its First Annual Inclusive Community Development Awards: Paraquad, LaunchCode, and the Regions Foundation; Easterseals Iowa and Iowa Able Foundation; and Houston Financial Inclusion Working Group and JPMorgan Chase. The purpose of the awards is to raise the visibility of organizations' activities that support low and moderate-income (LMI) individuals with disabilities. National Disability Institute is the first and only national organization exclusively focused on people with disabilities and their families'

financial health and wellness. Launched in 2019, the Center is focused on the importance of inclusive community development activities.

The Paraquad Job Training Center offers services for individuals with diverse needs and goals to progress from pre-employment services to employment placement. Funding from the Regions Foundation, a Regions Bank nonprofit initiative, supported the Culinary Training Program and the Computer Training Program in partnership LaunchCode. LaunchCode is a St. Louis nonprofit "committed to providing accessible pathways to family-sustaining tech careers for people of all backgrounds and experiences," said Jeff Mazur, Executive Director of LaunchCode. The partnership is helping St. Louisans with disabilities into high-wage, upwardly-mobile tech careers.

The next winner, the Iowa Able Foundation (IAF), helps individuals with disabilities acquire assistive technology devices. IAF's approach is to collaborate with companies, organizations, government agencies, and other nonprofit organizations to produce outcomes for Iowans that otherwise would not be available. "We would not be able to serve more than 3,000 Iowans annually without the support of great partners like Iowa Able. It is through this collaborative effort that we can make a life-changing difference for so many Iowans," said a senior Program Director.

The final winner, the Houston Financial Inclusion Working Group, aims to improve the financial stability of people with disabilities through actively engaging clients in mainstream financial services, promoting financial education to ensure accessibility and inclusion, and help clients overcome credit barriers through financial resource fairs, webinars and workshops and one-on-one financial coaching through its partnering agencies. As part of JPMorgan Chase's philanthropic efforts in Texas, the company aims to promote a culture of inclusivity.

NDI emphasizes poverty reduction, financial capability, and financial inclusion and evaluated nominees based on innovation, responsiveness, collaboration, and impact in building a better financial future for people with disabilities and their families. [Source: PR Newswire]

#### **ADDITIONAL INFORMATION:**

[Center for Disability-Inclusive Community Development Announces the Winners of Its First Annual Inclusive Community Development Awards](https://www.prnewswire.com/news-releases/center-for-disability-inclusive-community-development-announces-the-winners-of-its-first-annual-inclusive-community-development-awards-301170159.html)

<https://www.prnewswire.com/news-releases/center-for-disability-inclusive-community-development-announces-the-winners-of-its-first-annual-inclusive-community-development-awards-301170159.html>

#### **VIRTUAL REALITY TECH HELPS PEOPLE WITH DISABILITIES**

November 9, 2020 – England based Sienna Fisher has had muscular dystrophy since birth and has never been able to walk unaided. She has shared her discovery of virtual reality (VR) and the many

perks it has for people with disabilities. According to Fisher, VR can help wheelchair users get used to using a wheelchair by simulating situations such as road-crossings or tight indoor spaces. This helps them practice before attempting the real thing. She added that VR could also be used to rehabilitate wheelchair users who are learning to walk. She wrote, "A simulated walking experience can trigger a patient's brain to adapt faster to new motoric skills."

VR can also be used to assist those with vision disabilities. Fisher gives the example of a London-based startup that developed a VR headset that helped people with limited sight restore their sight almost to normal levels." She also describes SightPlus, and Samsung's Relumino, both of which claim improving sight, benefiting users' mental health, learning, and overall quality of life. Finally, Fisher describes the gaming aspect of VR, which can be an exciting escape from real life and can simulate activities that you usually cannot participate in. For example, I always [loved] to hike, but I couldn't because of my wheelchair," said Fisher. "In a workshop in London, I tried a VR headset that simulated walking on stones at the top of the mountain. It felt so real, and I was happy I could experience hiking." Looking ahead, Fisher hopes that the availability of the technology will continue to grow and that scientists will find more therapeutic uses for it. [Source: Sam Lewis via AMP]

#### ADDITIONAL INFORMATION:

[How can Virtual Reality technology help persons with disabilities? - Disability Insider](https://disabilityinsider.com/story/how-can-virtual-reality-technology-help-persons-with-disabilities/)  
<https://disabilityinsider.com/story/how-can-virtual-reality-technology-help-persons-with-disabilities/>

#### **NEW GUIDELINES FOR DEVELOPERS: XR SOFTWARE ACCESSIBILITY**

November 6, 2020 – While augmented, virtual, and mixed reality (XR) software has come a long way in terms of sound and graphic quality, accessibility for users with disabilities has been overlooked. On the 75th anniversary of the National Disability Employment Awareness Month, celebrated in October, the XR Association (XRA) updated its guidelines to address this issue. The XRA is a nonprofit organization that "promotes the dynamic growth of the XR industry" with association members from some of the biggest hardware manufacturers for virtual, augmented, and mixed reality. The new update to its guidelines, titled "Accessibility & Inclusive Design in Immersive Experiences," is available as [a standalone document](#) and contains detailed UI/UX best practices for all the categories of disabilities. The authors of the document state that they collaborated with disability advocacy groups and individuals with disabilities to develop the guidelines and encourage developers to involve them in designing and testing XR software. The new accessibility guideline contains recommendations for general accessibility, as well as visual, auditory, mobility, and cognitive access, specifically.

In the general category, XR software needs to allow users more flexibility. Suggestions include letting the user remove and/or reduce visual background details and audio, reducing speed, saving progress, and adding undo/redo functions, among others. Making XR software, games, and apps more inclusive means that the potential market for both hardware and content will increase. One of the key figures in enumerating the guidelines, Larry Goldberg, Head of Accessibility at Verizon Media, said, "The XR Access Initiative was formed to help ensure all voices were heard – across multiple stakeholder groups – in order to develop and advance a shared vision for the inclusive design and accessibility in XR technologies." [Source: AR Post]

#### ADDITIONAL INFORMATION:

[New Guidelines for Developers: XR Software Should Be Accessible for Users With Disabilities](https://arpost.co/2020/11/06/developers-xr-software-accessibility/)  
<https://arpost.co/2020/11/06/developers-xr-software-accessibility/>

## UPCOMING EVENTS

### **ASSISTIVE TECHNOLOGY CONFERENCE OF THE NEW ENGLAND REGION (USA)**

The COVID-19 pandemic has led to the Assistive Technology Conference of New England (ATCNE) to take a virtual format from November 2020 – May 2021. The upcoming sessions for this quarter include

- *Tele-engagement for Individuals Using Augmentative and Alternative Communication* (January 18)
- *Creating an Accessible Workspace: AT Solutions for Higher Education and the Workplace for Individuals with Learning Challenges* (February 2)
- *Versatile and Engaging Activities for Teaching Language and Literacy to Students with Complex Needs* (March 8)
- *The Coaching Model: Not Bill's Playbook. How to do Distance with learners Who Won't Watch Your Screen* (March 29)
- *Fifty Ways to Extend Literacy Encounters with Everyday Technologies* (April 6)

#### ADDITIONAL INFORMATION:

[Assistive Technology Conference of New England](https://www.assistivetechconference.com/2020-presentations/)  
<https://www.assistivetechconference.com/2020-presentations/>

### **22<sup>ND</sup> ANNUAL ASSISTIVE TECHNOLOGY INDUSTRY ASSOCIATION (ATIA)**

The Assistive Technology Industry Association (ATIA) will virtually host its annual Assistive Technology Conference from January 25-28, 2021, and February 1-4, 2021. This year's event will feature a range of event options from free content to full-event passes, including live sessions and

on-demand workshops. There are also options for individuals to join for a single day or the full eight days. The ATIA 2021: AT Connected indicates that their education program will include a variety of 150+ live and recorded education over eight days, and all recorded sessions will be available until June 2021. There will also be 3-hour intensive seminars on January 30 and February 6. The sessions are as follows:

- Augmentative & Alternative Communication (AAC)
  - Monday, January 25 from 11:30 am – 6:00 pm EST
  - Thursday, February 4 from 11:30 am – 6:00 pm EST
- Vision & Hearing Technologies
  - Tuesday, January 26 from 11:30 am – 6:00 pm EST
  - Wednesday, February 3 from 11:30 am – 6:00 pm EST
- Education & Learning
  - Wednesday, January 27 from 11:30 am – 6:00 pm EST
  - Monday, February 1 from 11:30 am – 6:00 pm EST
- AT for Physical Access & Participation
  - Thursday, January 28 from 11:30 am – 6:00 pm EST
  - Tuesday, February 2 from 11:30 am – 6:00 pm EST

**ADDITIONAL INFORMATION:**

[ATIA Conference](#)

<https://www.atia.org/atia-2021/>

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**TECHNOLOGY AND DISABILITY POLICY HIGHLIGHTS, WINTER ISSUE 2020**

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The Technology and Disability Policy Highlights (TDPH) is a monthly newsletter that reports on national public policy events and tracks emerging issues of interest to individuals with disabilities, researchers, policymakers, industry, and advocacy professionals. The Wireless RERC is a research center that promotes universal access to wireless technologies and explores their innovative applications in addressing the needs, user experiences, and expectations of people with disabilities. For more information on the Wireless RERC, please visit our website at [\[http://www.wirelessrerc.org\]](http://www.wirelessrerc.org). For further information on items summarized in this report, or if you have items of interest that you would like included in future editions, please contact this edition's editors Salimah LaForce [\[salimah@cacp.gatech.edu\]](mailto:salimah@cacp.gatech.edu), Dara Bright [\[dara.bright@cacp.gatech.edu\]](mailto:dara.bright@cacp.gatech.edu), or Anushri Kumar [\[anushrik@gatech.edu\]](mailto:anushrik@gatech.edu). If you wish to update your email address, send an email to [salimah@cacp.gatech.edu](mailto:salimah@cacp.gatech.edu).

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