



Accessing Your World: What's new in Environmental Control Technologies?

Ben Jacobs, Accommodations Specialist

Tools for Life | AMAC Accessibility

College of Design | Georgia Tech

CVI 12 March 2018

Today's Agenda



- AMAC Accessibility and Tools for Life
- Smart Speakers
 - Google Home
 - Amazon Echo
 - In depth Features
- Switch Access Solutions
- Alternate Access Solutions
- Smart Home Technologies
- CES 2018 Upcoming Tech

Accessibility Made Smart



AMAC creates practical solutions that work, with a focus on utility, ease of use, and high quality.

- **Accessibility Consulting** focuses on organizational accessibility needs with evaluation, technical assistance, customer support, and website accessibility solutions.
- **Braille Services** produces customized projects from both print materials and electronic text including partial books and chapters or graphics only using cutting-edge technology.
- **Captioning Services** makes classrooms, meetings, labs and other audio environments fully accessible for deaf or hard-of-hearing.
- **Professional E-Text Producers** provide high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML.
- **Certified Assistive Technology team** provides on-site and remote assessments, demonstrations, training and technical assistance for education, work, and daily living environments.

For more information, please visit our website at www.amacusg.org

Tools for Life (TFL)

Tools for Life (TFL), Georgia's Assistive Technology Program, helps Georgians of all ages and disabilities gain access to and acquire assistive technology devices and services so they can live, learn, work, and play independently in the communities of their choice.



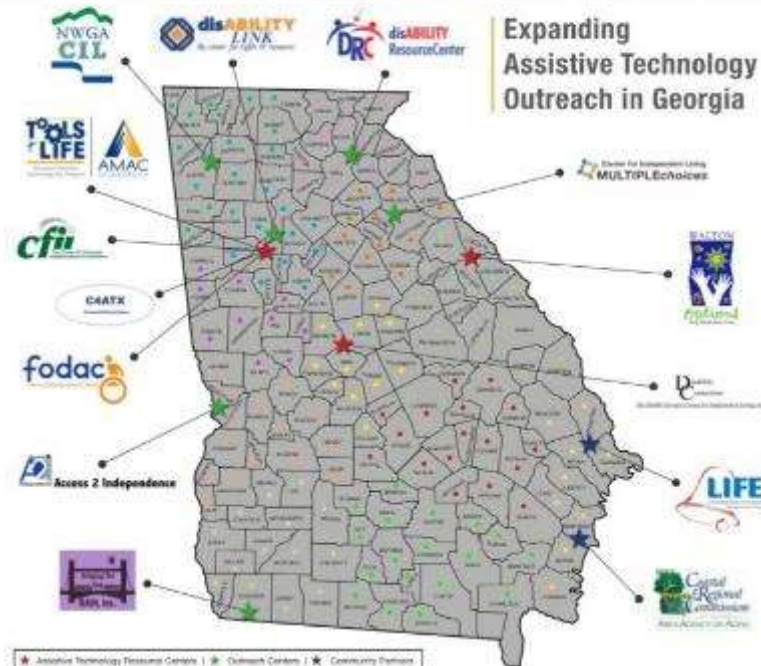
Tools for Life



- Tools for Life is a program of AMAC Accessibility at Georgia Tech.
- We serve individuals of all ages and disabilities in Georgia.
- TFL Network
 - Assistive Technology Resource Centers/Outreach Sites/Community Partners
 - Lending Libraries
 - Demonstrations
 - Training
 - AT/DME Reuse
 - AT Funding Education/Assistance and Resources
- Online Resources
 - www.gatfl.org

Tools for Life Network

Assistive Technology Resource Centers, Outreach Centers, Community Partners and Affiliates



GEORGIA'S AGING & DISABILITY RESOURCE CENTERS

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> Atlanta Regional Commission Aging Division
1000 Peachtree Street, Suite 1000, Atlanta, GA 30309 Cherokee County Aging Agency on Aging
1000 Peachtree Street, Suite 1000, Atlanta, GA 30309 CSW Aging Agency on Aging
1000 Peachtree Street, Suite 1000, Atlanta, GA 30309 Heart of Georgia Aging Agency on Aging
1000 Peachtree Street, Suite 1000, Atlanta, GA 30309 | <ul style="list-style-type: none"> Lowndes County Georgia Mountain Area Agency on Aging
1000 Peachtree Street, Suite 1000, Atlanta, GA 30309 Madison County Area Agency on Aging
1000 Peachtree Street, Suite 1000, Atlanta, GA 30309 Northwest Georgia Area Agency on Aging
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1000 Peachtree Street, Suite 1000, Atlanta, GA 30309 Southwest Georgia Area Agency on Aging
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1000 Peachtree Street, Suite 1000, Atlanta, GA 30309 |
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Visit Us Online



TFL AppFinder



Search by:

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✓ Categories

- Book
- Education
- Environmental Adaptations
- Hearing
- Cognition, Learning, Developmental
- Navigation
- Personal Care and Safety
- Productivity
- Communication
- Therapeutic Aids
- Vision

Tools for Life Assistive Technology Lab at Georgia Tech



What is Assistive Technology?

Assistive Technology (AT) is any item or piece of equipment that is used to increase, maintain or improve the functional capabilities of individuals with disabilities in all aspects of life, including at school, at work, at home and in the community.

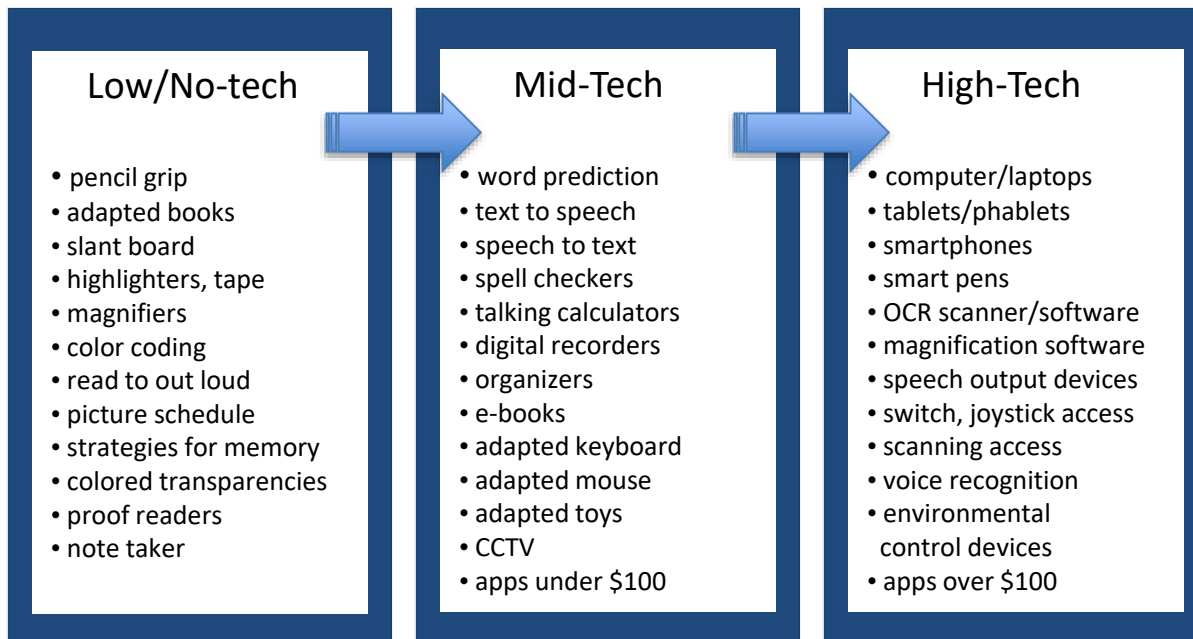
- Assistive Technology ranges from no/low/light tech to high tech devices or equipment.



Assistive Technology Continuum

Observations and “Hanging out with Intent”

Assistive Technology is a ***continuum of tools, strategies, and services*** that match a person's needs, abilities, and tasks.



Assistive Technology Services(“Tech Act”)



Assistive Technology Services are any services that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device. These services include:

- Evaluating
- Providing devices
- Selecting, Designing, Customizing
- Maintaining, Repairing
- Coordinating
- Training/Technical Assistance – student, family, and school service providers

Public Law 105-394 [29 USC 2201]

Why Assistive Technology?

- For a person without a disability, technology makes life easier.
- For a person with a disability, technology makes life possible.



AT Acquisition

- Tools for Life endeavors to break down the barriers which prevent individuals with disabilities, their families, and service providers from acquiring and effectively using Assistive Technologies to gain greater independence.
- Ensure AT products are available to Georgians with disabilities



What's New in Environmental Control?

Smart Speakers



- Internet connected
- Always listening
- Embedded assistant
- Internet of Things compatible
- Answers simple questions
- Make phone calls

Smart Speaker Families: Google Devices



Google Home Products Smart Speakers

- Google Home
- Google Home Mini
- Google Home Max

Key Features

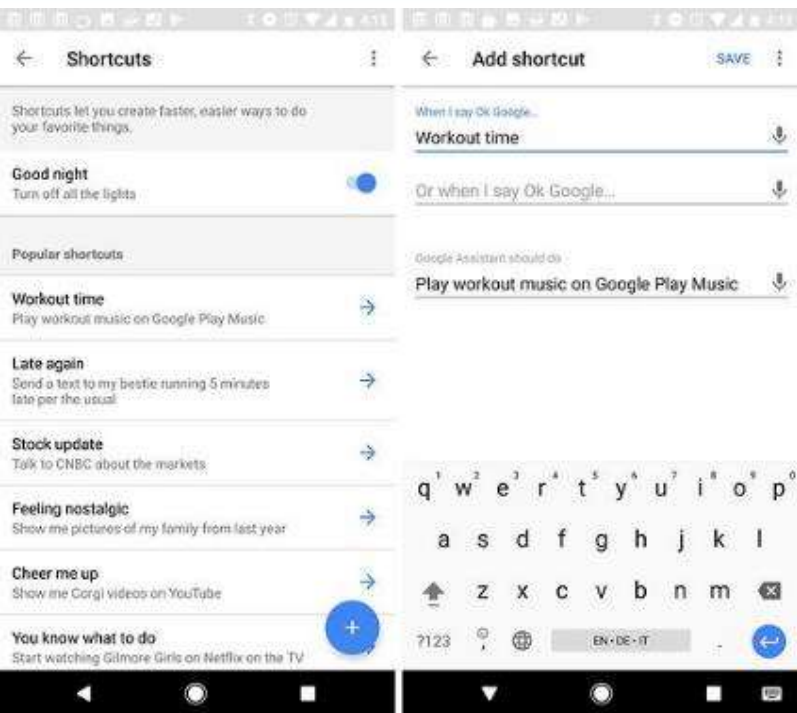
- Call any number in the US or Canada free! No phone service required.
- Chromecast Integration (Say what you want to watch)

Google Home Features: Chromecast Integration



- HDMI Dongle
- Make “dumb” TV “smart”
- Access apps
 - Netflix
 - Youtube
 - Music
 - Photos
- Say what you want to watch on your TV

Google Home Features: Shortcuts



- Google Home App
- Settings > More Settings > Shortcuts
- Allow custom voice commands
- Say one thing Google Home acts like you said another
- Multiple phrases for a single command

Smart Speaker Families: Alexa Devices



Amazon Echo Products Smart Speakers

- Echo 2nd Gen
- Echo Dot
- Echo Plus

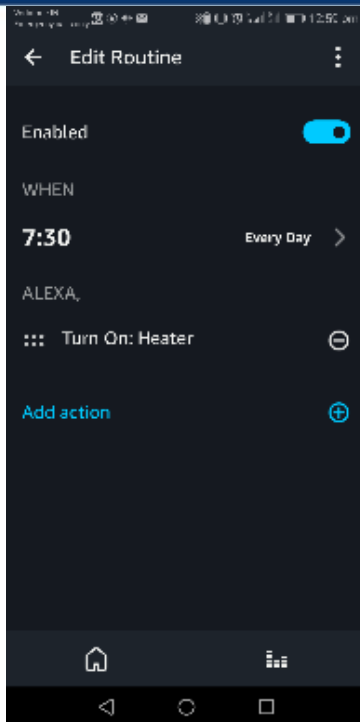
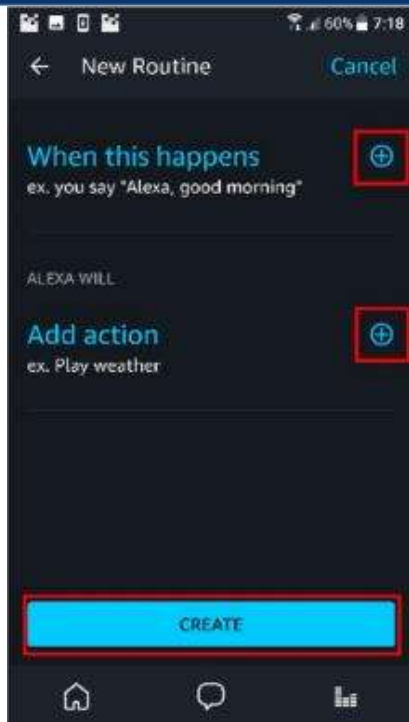
Smart Displays

- Echo Show
- Echo Spot

Key Features

- Call any number in US or Canada
- Drop In (check in on loved ones)
- Routines

Amazon Echo Features: Routines



- Link multiple actions to a single custom command
- Temporal context sensitive
 - Before 11am, “Turn on Kitchen” opens shades and turns on coffee pot
 - After 5pm, “Turn on Kitchen”, closes shades, turns on lights

Apple HomePod



- Available February 9th 2018
- Easy Setup
- Automatically adjusts sound levels to environment
- Integrated with Apple store and other Apple Software and Products
- Siri built in



- Switch access to phone
- Switch access to environmental control
- Bluetooth, Z Wave, HomeKit, IR, WiFi connected
- Custom voice commands through Siri
- Operates without internet access



- Switch access to phone
- Wireless head array capability
- Bluetooth connection to smart phone
- 48+ hour battery life
- Tecla App allows access to various smart home commands (Harmony, Alexa, IFTTT)

Smart Home Lights



- Phillips Hue Light Bulbs
- Lix
- TP Link
- Usage Scenario
 - Barry sometimes has to go to the restroom in the middle of the night. He is able to turn the lights on before he gets out of bed ensuring he isn't at risk of tripping and falling.

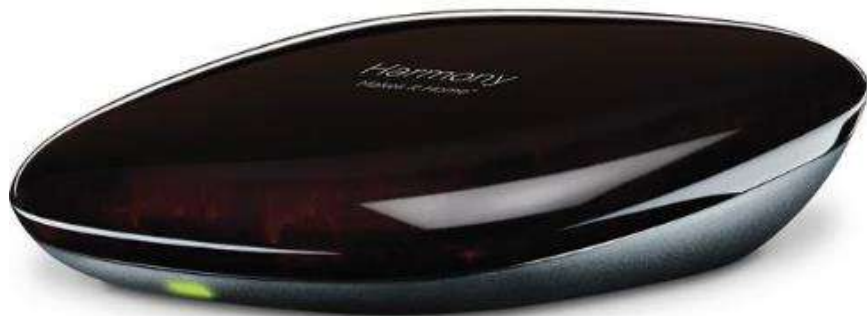


Smart Plugs



- Samsung Smart Plug
- TP Link Smart Wifi Mini

Logitech Harmony Hub



- Control just about any IR enabled device
 - TV
 - DVD/BluRay/VCR
 - Sound System
 - Cable Box
 - Fan/Air Conditioner
- Supported by Google Home and Amazon Echo

Samsung SmartThings Hub



- Hub connects all smart home devices
- Control devices remotely through app
- Routines
- Sensors
- Automation

Schlage Z Wave Home Keypad



- Control access to your home independently
- Single Use or Permanent PIN
- Hardware Key
- Z Wave through SmartThings Hub

CES (Consumer Electronics Show) 2018



Remo+ Doorcam



- First over the door security camera
- Easy mounting
- Wireless operation

Nanoleaf Remote



- Modular smart lights
- Remote sets mode based on what side it is on
- Rotate remote to dim and brighten lights

Lutron Sivoia QS Triathlon Shading System



- Window shade
- Amazon Alexa Enabled

Ecobee 4 Smart Thermostat



- Smart Thermostat
- Multiple temperature sensors
- Google Home and Amazon Echo Enabled

OTODO UGO Magic Wand



- Hub and remote
- Location sensitive
- Fingerprint sensor
- 2 gestures
 - Knock
 - Spin

Verdera Magic Mirror



- Alexa built in
- See information while getting ready for your day
 - Traffic
 - Weather
 - Medication Reminders
 - More

Kohler Konnect



Sensate Faucet

- “Pour eight ounces”

DTV+ Showering System

PerfectFill Bath Tech

- Draws the perfect temperature bath at your command

Numi Intelligent Toilet

- Foot Warmer
- Ambient Lighting
- Bidet
- Heated Seat
- Music





- Control smart home devices using wireless physical buttons
- Easy to press
- Up to 84 buttons supported

iHome iGV1



- Bedside alarm clock
- Bluetooth speaker
- Google Assistant built in

Hobot LEGEE-668 Vacuum Mop 4 in 1 Robot



- Autonomous robot
- Navigates any floorplan
- Thorough cleaning, doesn't miss corners
- Automatically switched between vacuum and mopping functions

Questions?



Contact Us



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Disclaimer



Disclaimer: Produced by Tools for Life (TFL), which is a result of the Assistive Technology Act of 1998, as amended in 2004. TFL is a program of the Georgia Institute of Technology, College of Design, AMAC Accessibility Solutions and Research Center and was made possible by Grant Number H224C030009 from the Administration for Community Living. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of HHS.