



What's New in Assistive Technology

Ben Jacobs

With contributions from the Tools for Life Team and Network

Tools for Life | AMAC Accessibility

College of Design | Georgia Institute of Technology

www.gatfl.gatech.edu

Agenda



Technology innovations are emerging at a rapid pace from wearables to robotics and mobile apps to connected homes. Much of this technology holds great promise for the future of independent living.

Presenters will share information on Tools for Life, Georgia's Assistive Technology Act Program and how to access services. Other topics will explore products on the market that have the potential to improve independence and improve quality of life.

For Handouts: www.gatfl.gatech.edu/tflwiki

AMAC Accessibility



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 Mission

Tools for Life, Georgia's Assistive Technology Act Program, is dedicated to increasing access to and acquisition of assistive technology (AT) devices and services for Georgians of all ages and disabilities so they can live, learn, work and play independently and with greater freedom in communities of their choice.



Visit us Online!



At — A 2)))

Georgia Tech **TOOLS for LIFE**
Georgia Assistive Technology Act Program

HOME ASSISTIVE TECHNOLOGY TFL NETWORK CALENDAR OF EVENTS Search our Site Go

TRAINING

FUNDING

PUBLICATIONS

TFL WEB

MEET THE TFL TEAM

MEET THE ADVISORY COUNCIL

DIRECTIONS/MAP

JOIN OUR MAILING LIST

SCHEDULE A TOUR

Welcome AT Services Try AT Get AT AT Guides Research



Stay up-to-date on the latest assistive technology strategies and solutions with customized individual and group trainings.

Welcome to Tools for Life

Tools for Life, Georgia's Assistive Technology Act Program, is dedicated to increasing access to and acquisition of assistive technology (AT) devices and services for Georgians of all ages and disabilities so they can live, learn, work and play independently and with greater freedom in communities of their choice.

Tools for Life and the TFL Network work collaboratively together to accomplish our mission through:

- [AT Information](#)
- [AT Evaluation and Assessment](#)
- [AT Funding Options & Solicitation](#)

GATE 2016
DEC 9 Georgia Tech Student Center

WEBINARS
• [Current Webinar Schedule](#)
• [Webinar Archives](#)

TOOLS FOR LIFE APP FINDER

...for Living, Learning, Working, and Playing.

AT ONLINE EXCHANGE


AT FUNDING GUIDE
DOLLARS & SENSE
SUPPORTING THE AT TAKING OFFERS

Georgia Assistive Technology in Education (GATE) Annual Seminar

- Friday, December 8, 2017
- Georgia Tech Student Center
- This event is open to all Georgia educators, parents, students with disabilities, family members and anyone else interested in learning more about assistive technology in education!



Welcome to the Wireless Inclusive Technologies RERC

Mission Statement:

"To integrate established wireless technologies with emerging wirelessly connected devices and services for a transformative future where individuals with disabilities achieve independence, improved quality of life, and enhanced community participation. Through an agenda of research, development, training and outreach activities, successful innovations will engage, connect and accelerate access to a dynamic inclusive wireless ecosystem."

Connect with Us!

[Like us on Facebook](#) 

[Follow us on](#) 

[Join our](#)  [group](#)

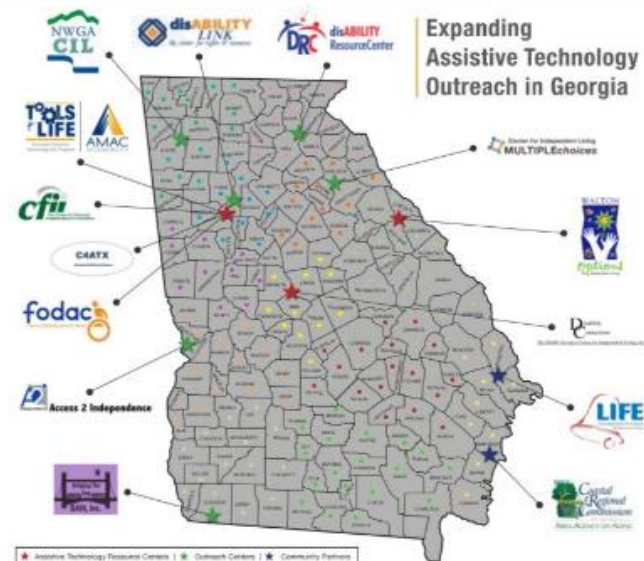
 [Subscribe](#)

[SUBSCRIBE TO NEWSLETTER](#)

TFL Network

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"> 18 Area Regional Commission Aging Division
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro 2 South Georgia Area Agencies on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro 22W Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro West of Georgia Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro | <ul style="list-style-type: none"> Laurens Link Georgia Mountains Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro Midstate Georgia Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro Northwest Georgia Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro West Georgia Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro | <ul style="list-style-type: none"> West Metro Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro Southwest Georgia Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro South Georgia Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro Southwest Georgia Area Agency on Aging
Albany, Albany, Columbus, Dalton, Gainesville, Marietta, Milledgeville, Newnan, Savannah, Thomasville, Valdosta, Waynesboro |
|--|---|---|

TFL Appfinder Database



Search by:

✓ App Name

✓ Categories

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

TFL AT Solutions Lab



Tablets
Vision & Hearing
DME
Communication
Games
Software
Switches
Keyboards
More!



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.

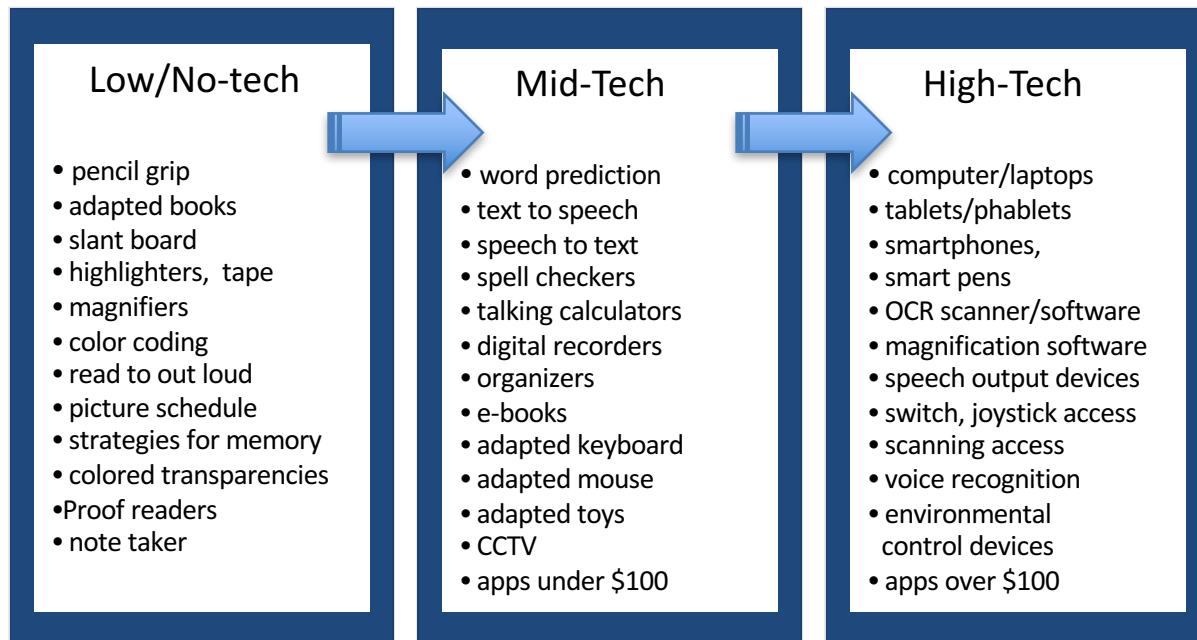
Assistive Technology ranges from no/low/light tech to high tech devices or equipment.



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.



Why Assistive Technology?

For a person without a disability,
technology makes life easier.

For a person with a disability,
technology makes life possible.

**TIP: USE AT! We have yet to
meet a successful individual who
does not use any AT.**



Effective AT Assessment



- Uses a feature-match approach
- Incorporates on-going educational/life planning
- Hanging out with Intent
- Targets natural environments
- Utilizes the competencies of multiple team member
- Demands meaningful follow-through

The “FAST” Track



Frustration

Anxiety

Stress

Tension

AT Helps!

Assistive Technology strategies and solutions can help support those living with disabilities, the aging population and those who have problems with:

- speaking
- hearing
- seeing
- moving around
- getting places
- memory
- cognition (thought processes and understanding)
- daily living activities, such as dressing and preparing meals
- socializing.

Assistive Technology Funding Solutions

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.
- To insure that AT products are available to Georgians with disabilities
- Eliminate Funding Barriers

TFL AT Acquisition Programs



- 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.
- To insure that AT products are available to Georgians with disabilities
- Eliminate funding barriers



- With a strong network of volunteers and partners, Friends of Disabled Adults and Children (FODAC) provides refurbished equipment and services improve their overall quality of life.
- Refurbished items can be cost effective
- FODAC is a partnering agency and have programs for:
 - Durable Medical Equipment
 - Home Mods
 - ReMount
 - Disposable Medical Equipment
- www.fodac.org



Exploring Assistive Technology Solutions

Communication Tools

Low Tech

- Symbols
- Comm boards, wallets, rings etc.

Mid Tech

- Single Message
- Sequenced Messages
- Static Display Devices

High Tech

- Dynamic Display
- Icon Sequencing



Assistive Listening Devices

- Audio/Hearing Loop
- Infrared System
- FM System
- Wearable device



Visual Alerts

- Visual doorbells
- Flash on your cellphone
- Smoke/carbon monoxide detectors
- Flashing computer screen



Physical Alerts

- Haptic alerts on phone and wearables
- Vibrating alerts
- Bed shaker



AT for Daily Living

Non-Slip Placemat

- Keep plates and other items from moving
- Use on roller walkers
- Cut to fit



Freedom wand

- toilet aid



•Freedom Dinnerware

- Low vision, Alzheimer's, Arthritis, stroke
- Suction keeps plate from moving
- Helps with getting food on utensils



Epic ID Emergency ID Band

- Easy for first responders to access
- Salt water safe USB with a durable stainless steel clasp and USB cover
- No subscription or internet connection is required
- Plug this USB into your computer and input or update your personal information medical history and insurance information
- Both PC and Mac compatible



Reminder Rosie

- Alarm Clock
- Personal Voice Reminder
- Easy to use



Medication Solutions

MedCenter

- Organizer with Reminder System
- Monthly display
- Alarm
- Talking



Pillpac.com

- Organized pills packaged by pharmacy
- Sealed pouches for each day
- Time stamped
- Lessen medication errors



www.alzstore.com

- Holds 29 doses
- Set up to 4 alarms each day



Telephone Options

Future Call

Amplified Picture Memory Phone

Amplified Volume - Up To 40dB

Hearing Aid Compatible

One-Touch Emergency Button

Easy-To-See Oversized Photo Buttons

Bright Visual Ringer



Clarity Picture Phone

Amplified Picture Memory Phone

Amplified Volume - Up To 18dB

Hearing Aid Compatible

Easy-To-See Oversized Keypad Buttons

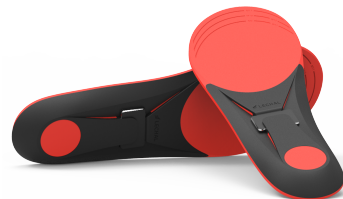
9 Programmable Photo-Dial Memory Buttons

Bright Visual Ringer



Wearables

- Lechal Haptic Inserts
- SmartWatches
 - Apple Watch
 - Android Wear
- Orcam
- Google Glass
 - Back to the drawing board



Amazon Echo

amazon echo

Always ready, connected, and fast. Just ask.



- Speech-controlled speaker system
- All functions are server side
- Environmental Control – Lights, Thermostat, Personal Security, TV, and more
- Informative Services – Traffic, Weather, News, Conversions, Alarms and Reminders, and more
- Entertainment – Live Radio, Audible Books, Kindle Books, Pandora, Amazon Music, and more
- Full Size Echo - \$179.99
- Echo Dot - \$50

More access with voice



Echo Show

- Video calling
- Touchscreen Display
- View weather
- Recipes
- Smart home devices
- \$229



Echo Look

- Hands free camera
- Style assistant
- \$199

Google Home



- Google's answer to Amazon's Echo
- Environmental Control
- Entertainment Control – “Watch Stranger Things on TV” “Watch videos of puppies on TV.”
- Information Services
- Call anyone using your voice
- Google Home - \$129
- Chromecast - \$35

Philips Hue Light Bulbs



- Wifi Connected
- Dimmable
- Displays Over 16 Million Colors
- Compatible with Amazon Echo
- Color Starter Kit \$174.99

Schlage Z-Wave Keypad Lever

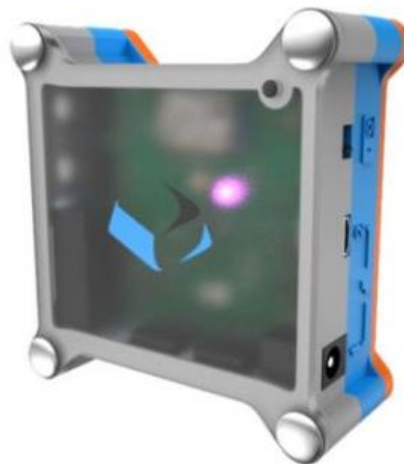


- Works with PIN, Key, or Z Wave
- Compatibility workarounds with Amazon Echo are not complex
- Independently manage security when paired with a security camera
- \$199.99

Tecla Shield

Wireless device that controls smartphones and tablets using your external switches or the driver controls of your power wheelchair

The only switch interface that works with both iOS® and Android mobile devices.

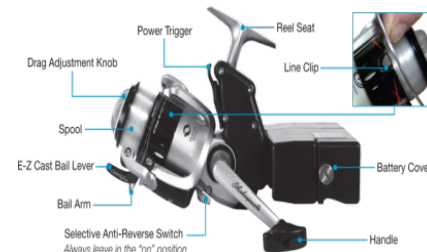


Recreation AT

- Recreation is a necessity
- Numerous benefits – Cognitive, Mood, Physical, etc.
- Recreation comes in many forms – Video Games, Card Games, Board Games, Playing Music, Sports, Exercising, Crafts, etc.
- There are options and technologies to make each of these activities accessible.



Playing card holder



TFL Gaming Initiative



Tools for Life has recognized the importance of play and is starting an initiative dedicated to gaming with disabilities. Some objectives of the program are:

- Demonstrate the accessibility of gaming
- Build relationships with developers and aid in creating more accessible games
- Increase public awareness of the importance of accessibility in games

There are many benefits to playing games

- Improved Hand/Eye coordination
- Increased problem solving and cognitive function
- Better handle stressful environments
- Social outlet



We are pleased to announce we will be presenting a panel on Gaming with Disabilities at DragonCon again this year!

Please join us on Saturday, September 2nd at 7:00pm and 8:30pm in Augusta E-G in the Westin Peachtree Plaza Hotel in Atlanta.

Xbox One Elite Wireless Controller



First party controller with accessibility features.

Modular construction includes multiple thumbsticks, directional pads, and paddle buttons.

Remap any input to any button.

Highly customizable.

QuadStick



Mouth operated game controller for those living with Quadriplegia.

Joystick, four sip and puff sensors and a lip position sensor.

Compatible with PS3, Android, and PC.

USB adapter allows control of Xbox 360, Xbox One and PS4.



TrackIR is an optical motion tracking game controller for Microsoft Windows

Tracks head motion with up to 6 degrees of freedom.

- Forward/Backward
- Left/Right
- Up/Down
- Roll
- Pitch
- Yaw

Boogie Dice



First self rolling, sound activated, programmable dice.

Activated using sound.

- Clap, snap, thump

Set roll duration, LED colors and more.

Smartphone app can also be used to activate the dice.

The Tools for Life Team



Carolyn Phillips

Director, Tools for Life

carolyn.phillips@gatfl.gatech.edu



Justin Ingham

Support Specialist

jingham3@gatech.edu



Samantha Peters

Program Specialist

speters37@gatfl.gatech.edu



Sarah Endicott

Research Scientist

sarah.endicott@design.gatech.edu



Asha Kumar

AT Lab Specialist

asha.kumar@gatfl.gatech.edu



Liz Persaud

Training and Outreach Coordinator

liz.persaud@gatfl.gatech.edu



Tori Holder

Outreach Specialist

tori.holder@gatfl.gatech.edu



Ben Jacobs

Accommodations Specialist

ben.jacobs@gatfl.gatech.edu



Martha Rust

AT Specialist

martha.rust@gatfl.gatech.edu



Danny Housley

AT Funding & Resource Specialist

danny.housley@gatfl.gatech.edu



Krista Mullen

Speech Language Pathologist

krista.mullen@gatfl.gatech.edu



Rachel Wilson

AT Specialist

rachel.wilson@gatfl.gatech.edu



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.