

# A Crash Course in iOS Accessibility

GATE 2019

CREATING THE NEXT®

# Center for Inclusive Design and Innovation



CIDI 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 web accessibility solutions.
- **Braille Services** produces customized projects from both print materials and electronic text including partial books and chapters or graphics
- **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: [www.amacusg.org](http://www.amacusg.org)

# 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.



# Begin with the End in Mind



# A Crash Course

A problem has been detected and Windows has been shut down to prevent damage to your computer.

The problem seems to be caused by the following file: kbdhid.sys

#### MANUALLY\_INITIATED\_CRASH

If this is the first time you've seen this stop error screen, restart your computer. If this screen appears again, follow these steps:

Check to make sure any new hardware or software is properly installed. If this is a new installation, ask your hardware or software manufacturer for any Windows updates you might need.

If problems continue, disable or remove any newly installed hardware or software. Disable BIOS memory options such as caching or shadowing. If you need to use safe mode to remove or disable components, restart your computer, press F8 to select Advanced Startup Options, and then select Safe Mode.

#### Technical Information:

\*\*\* STOP: 0x000000e2 (0x00000000, 0x00000000, 0x00000000, 0x00000000)

# Apple Accessibility

- Built in, not bolted on
- Options for various disability types
- Started with non-visual and low vision access
- Blossomed

# Non-Visual Access



# Where It Began

- For users with printed related disabilities
- iPhone 3GS debut
- Screen Curtain
- Voices
- Gestures
- Privacy
- Audio Descriptions



# The Power of the Rotor

# Braille Captions

. 3 4 5    ... 7 8 9

# Visual Access

# Features for Users with Low Vision

- Zoom
- Magnifier
- Display Accommodations
- Dynamic Text

# Zoom and Magnifier in Action



# Screen Accommodations

- Invert colors
- Color filters
- Reduce white point



# Physical Access

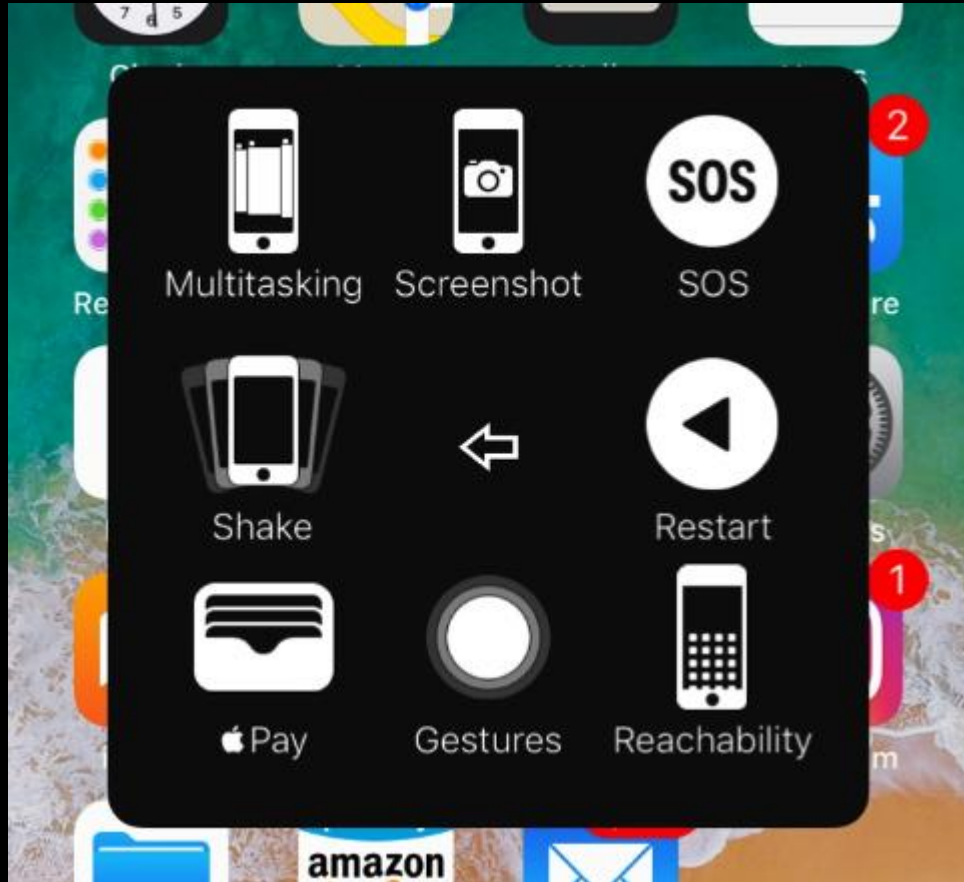


# Switch Access

- Offered on all iOS (and MacOS) devices
- Bluetooth or wired with adapter
- Can use camera of keyboard to control scanning



# Assistive Touch



- Very customizable
- Gestures
- Menus
- Functions

# Input Options

- One-handed keyboard
- Type to Siri
- Dictation
- Voice commands
- Handwriting with and without VoiceOver

# New in 2019 – Voice Control

- More useful than Siri Commands
- Control features, edit text, and manipulate phone with just your voice
- “What can I say?”
- Grid view
- Customized commands
- **VERY** sensitive



# Create a Custom Voice Command



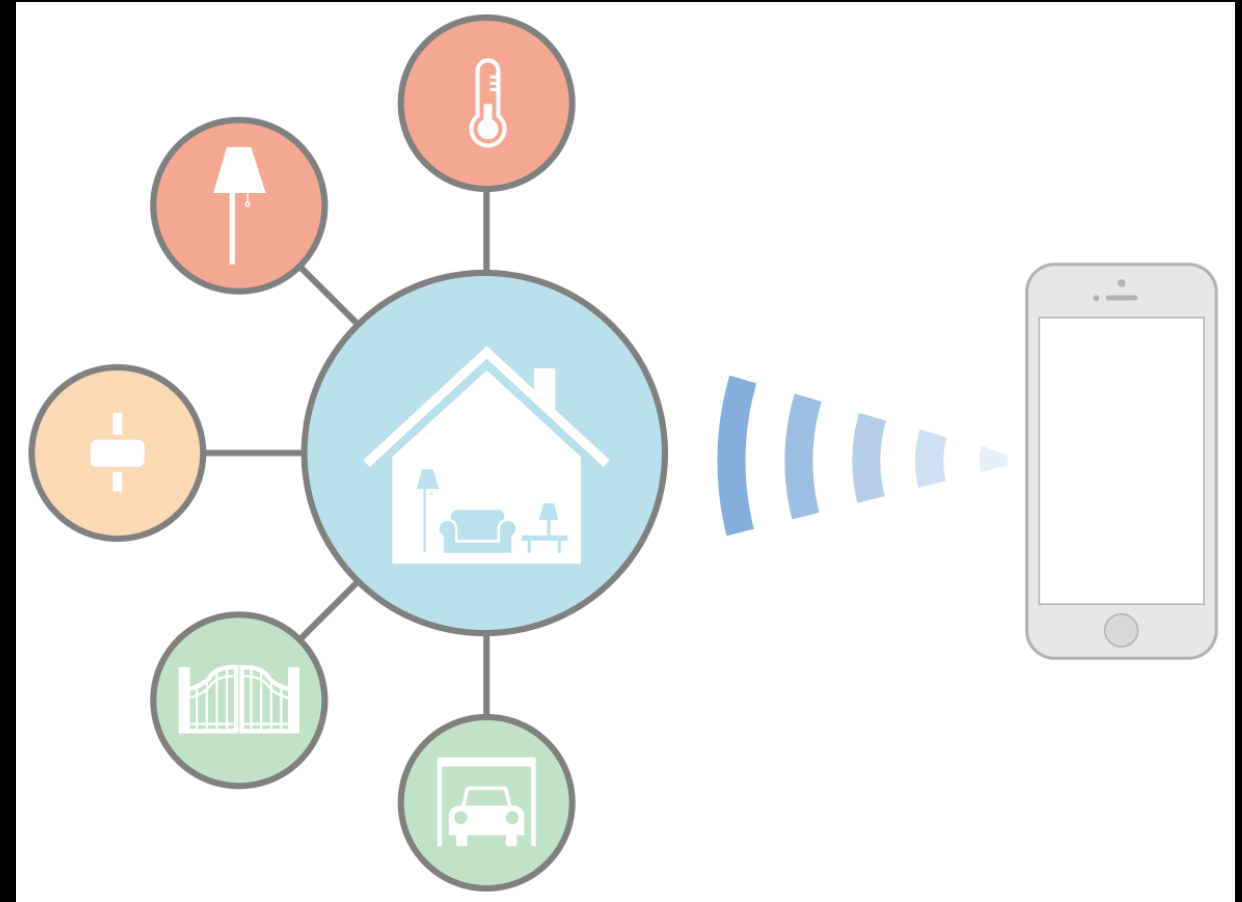
# Siri

- Open apps
- Send messages
- Ask questions
- Control settings



# Apple HomeKit

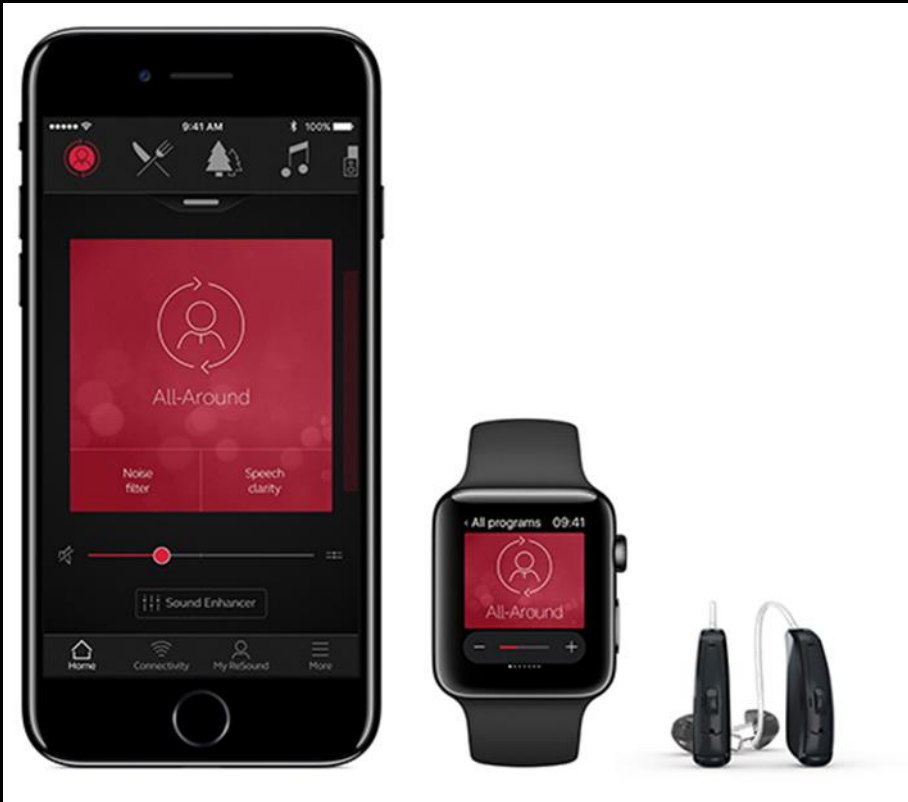
- Your native environmental control unit
- Control with voice or manually
- Interacts with dozens of devices (lights, doors, outlets, switches, alarms, etc)



# Hearing Access



# Supports for Hearing



- MFi hearing devices
- Live listen
- Flashing alerts
- Customized vibrations
- Software TTY
- Mono audio
- FaceTime
- iMessage

# Emergency SOS

# Best Practices

- Never be afraid to explore and customize!
- Peer support groups offer lessons
- Contact us!
- Can't find an accessibility feature? Try a third party app

# TFL App Finder Database

Search by:

- Price
- Category
- Operating system
- Free!

[www.gafl.gatech.edu](http://www.gafl.gatech.edu)



**What features do you want to see?**  
**Is something not working right?**  
**Need to figure out some accessibility?**  
**(call the Apple Accessibility line)**  
**1-877-204-3930**

Questions?

Comments?

Quips?

Queries?

Quandries?

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# Contact Us



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