Georgia Tech Center for Inclusive Design and Innovation

Software and Apps for Vision Loss

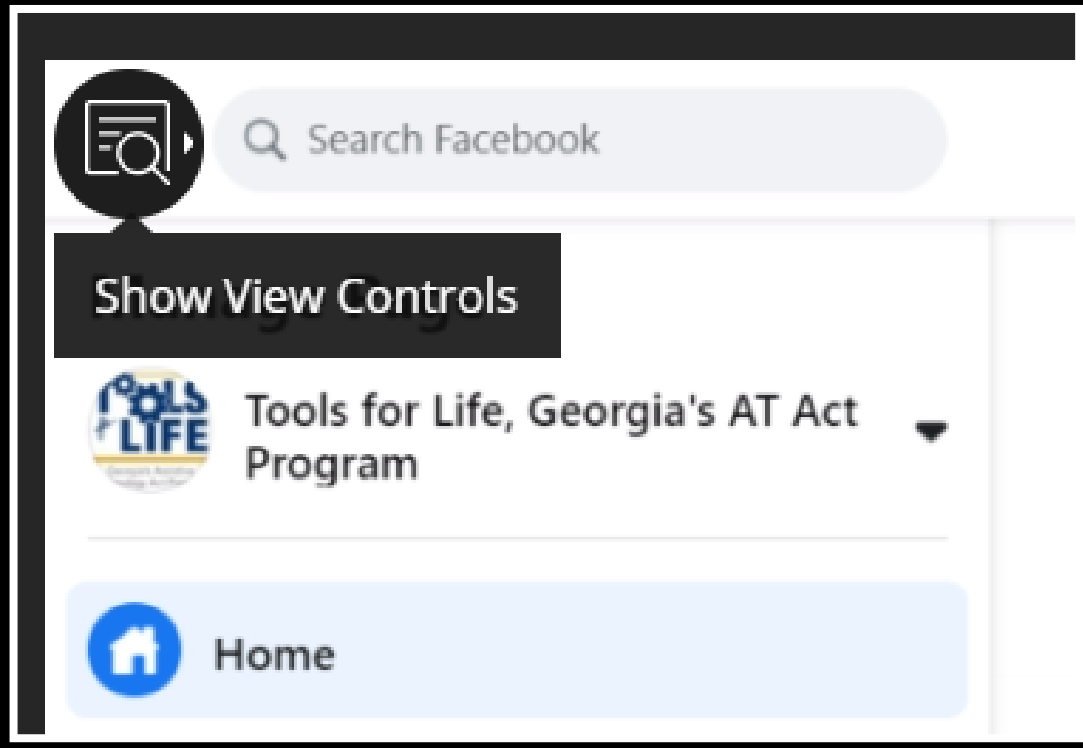
Danny Housley, Tools for Life

CREATING THE NEXT®

Welcome to Blackboard Collaborate!

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- This webinar is being recorded
- Type your questions or comments into the chat at the bottom right corner by selecting the purple tab
- Zoom into the shared screen with the view controls at the top left corner



ASK Webinar Series

- We are developing the Assistive Software Knowledgebase (ASK) a centralized, online resource on assistive software and mobile apps used as workplace accommodations. It will provide general product information as well as other information to help an employee maximize his or her use of the software.
- Today's presentation is part of an every-other-week series on the use of different types of software and mobile apps in the workplace.
- This development project is funded by grant #90IF0125 from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), within the Admin. for Community Living, U.S. Dept. of Health and Human Services.

Agenda

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Welcome and introductions- 5 minutes

Identifying barriers- 5 minutes

Visual Solutions- 15 minutes

Q&A- 5 minutes

Non-Visual Solutions- 15 minutes

Q&A- 5 minutes

Funding Resources/Wrap-up- 10 minutes

Learning Objectives

TOOLS for LIFE
Georgia's Assistive Technology Act Program

1- Participants will be able to identify three different screen reading options for non-visual access to operating systems and files.

2- Participants will be able to identify four options for screen magnification.

3- Participants will be able to identify which operating system – mobile or desktop – may benefit them better through built in and third party supports.

4- Participants will have three resources for finding funding solutions for acquiring assistive technology.

Where are the Barriers?

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- They're everywhere! (some are sneakier than others)
- Inaccessible print
- Poorly designed print and electronic materials
- Visual/non-visual access
- In the home, community, work and school environments
- Vary and change dramatically
- Cost

Visual Access

TOLS for LIFE
Georgia's Assistive Technology Act Program

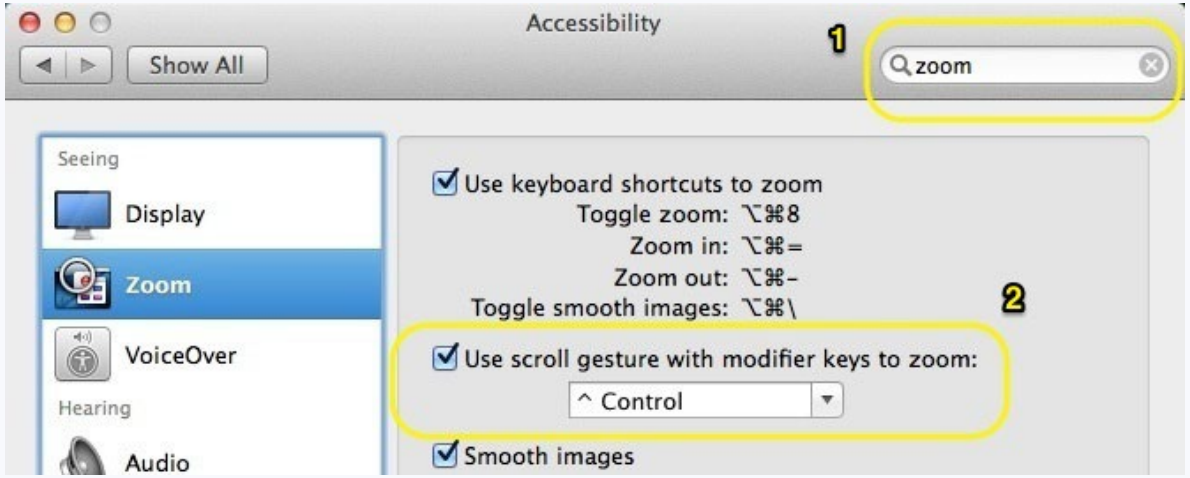
What's in the Box?

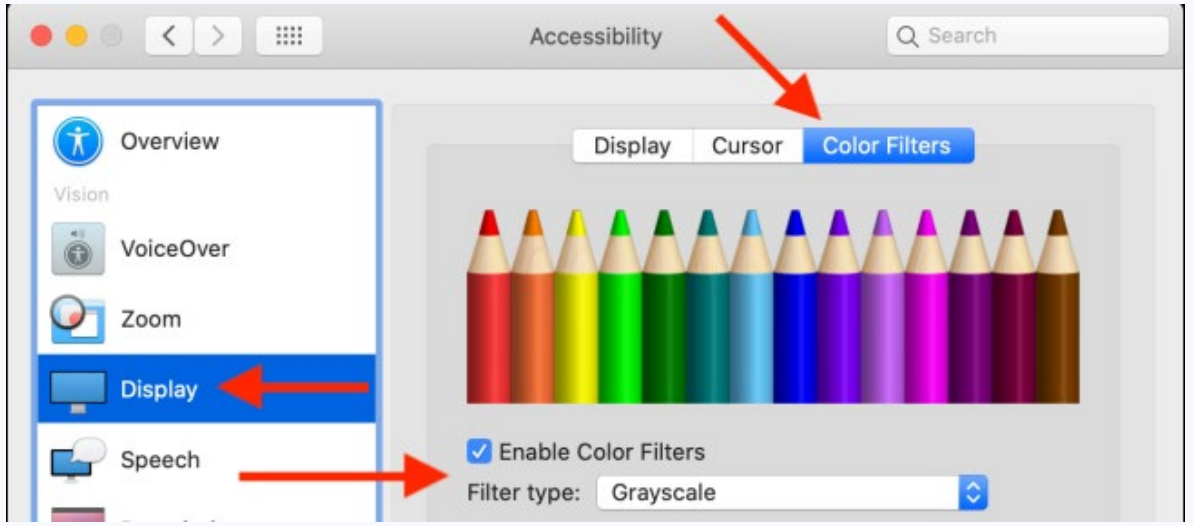
TOOLS for LIFE
Georgia's Assistive Technology Act Program

- More and varied options than there used to be
- Newer computers come with a (decent) screen reader and screen magnification options
- Voice control is becoming more prominent thanks to ubiquity in mobile platforms
- These items do no add to the cost
- JAWS, MAGic, Dragon and ZoomText

Mac

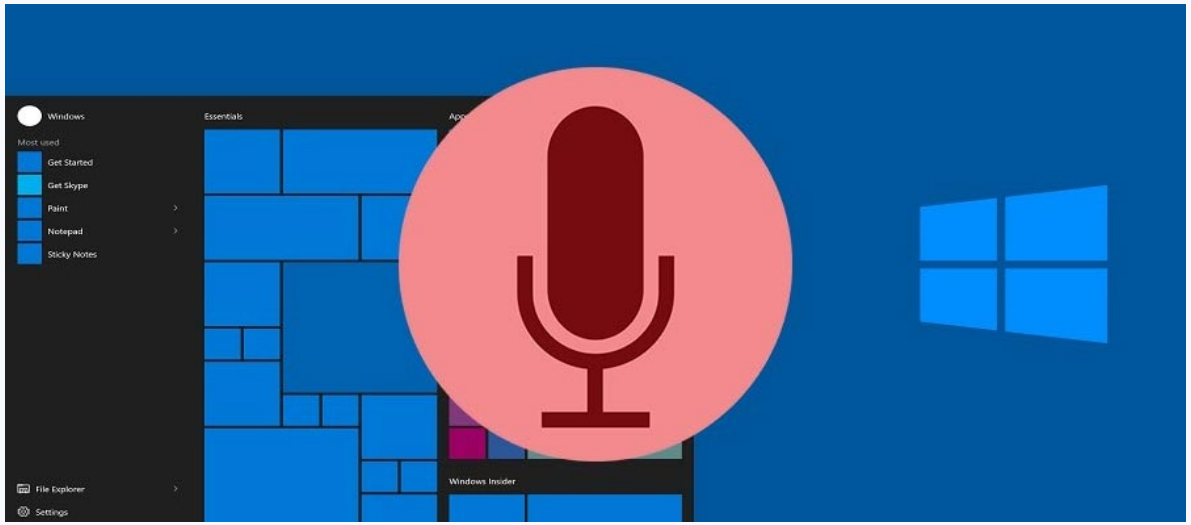
TOOLS for LIFE
Georgia's Assistive Technology Act Program

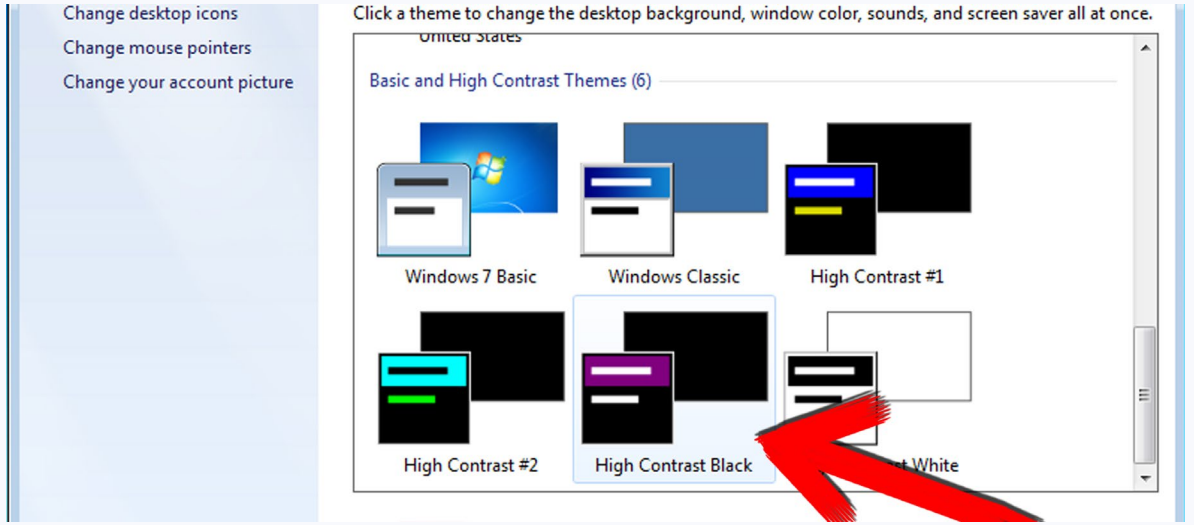




Windows

TOOLS for LIFE
Georgia's Assistive Technology Act Program

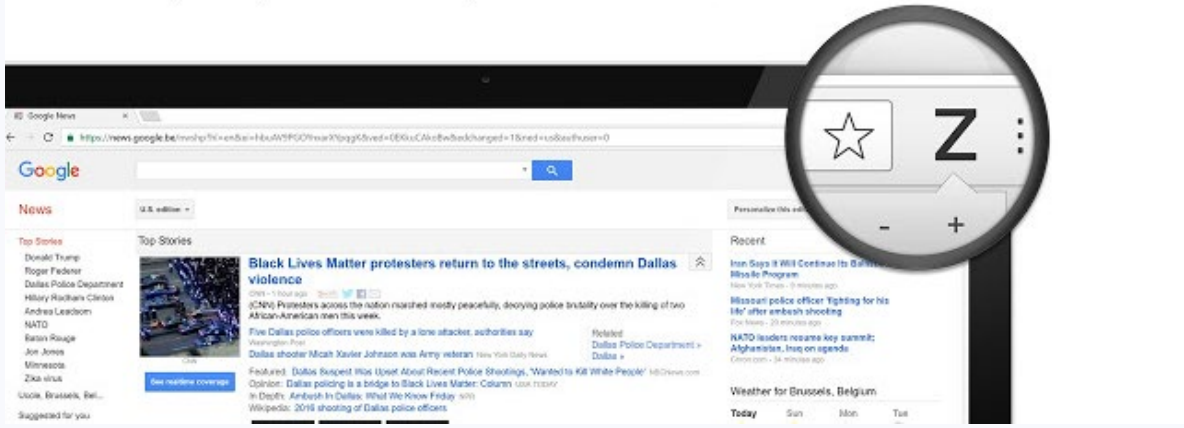


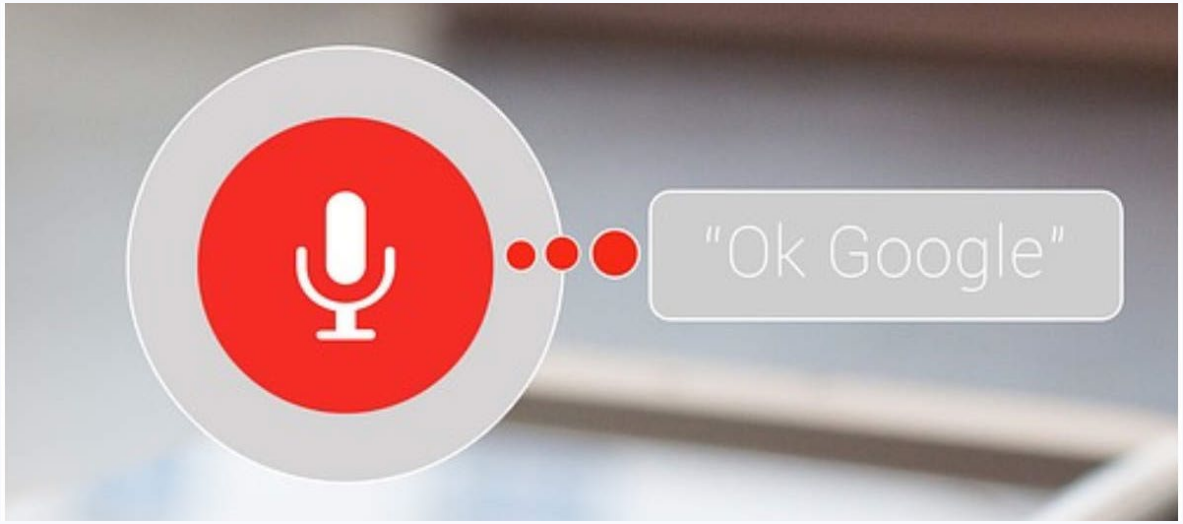


Chrome

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Save website Zoom value
Zoom all together In/Out
Scroll and Zoom
Manage Zoom level for each website





Third Party Visual Access

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- ZoomText - low vision access
  - $500 for just magnification, $700 with speech or $80/year
- Fusion - Visual and Non-visual access
  - $1,400 or $140/year
- Dolphin Supernova - Visual support with speech
  - $595

Freeware for Magnification

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- Virtual Magnifying Glass
  - http://magnifier.sourceforge.net
  - Windows, Linux and Mac options, up to 32x
- Zoom +
  - http://gipsysoft.com/zoomplus/
  - Windows, up to 32x
- Dragnifier
  - http://www.halley.cc/stuff/dragnifier.html
  - Windows, up to 8x

Text Manipulation/Annotation

TOOLS for LIFE
Georgia's Assistive Technology Act Program

How to input?

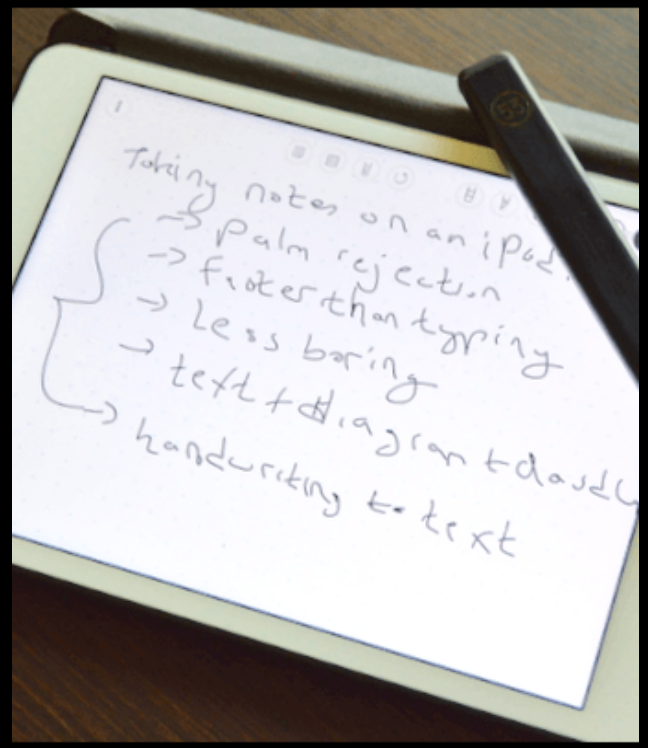
Organizing/Annotating

1. GoodNotes - 7.99

2. Liquid Text - Free

3. Evernote - Free

4. OneNote - Free



TOOLS for LIFE
Georgia's Assistive Technology Act Program

Questions?

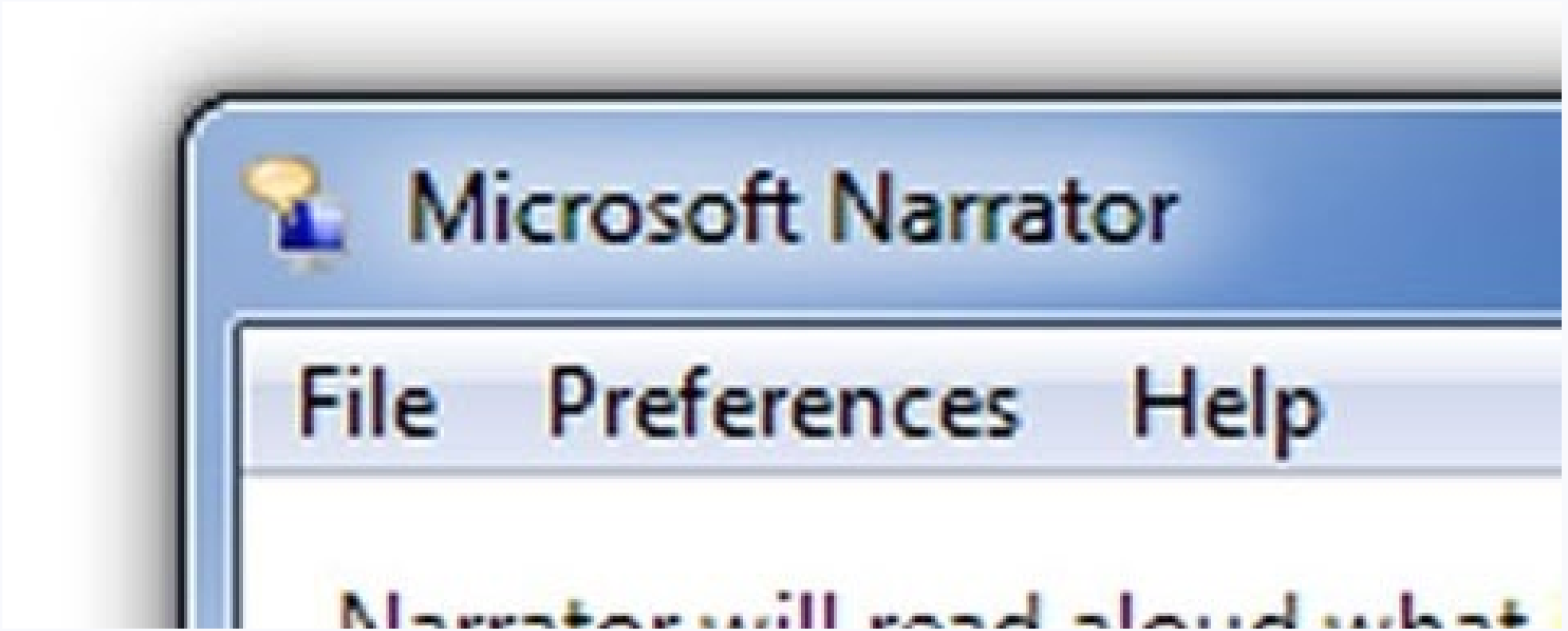
Non-visual Access

TOLS for LIFE
Georgia's Assistive Technology Act Program

Mac

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Windows



Chrome

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Third Party Screen Readers

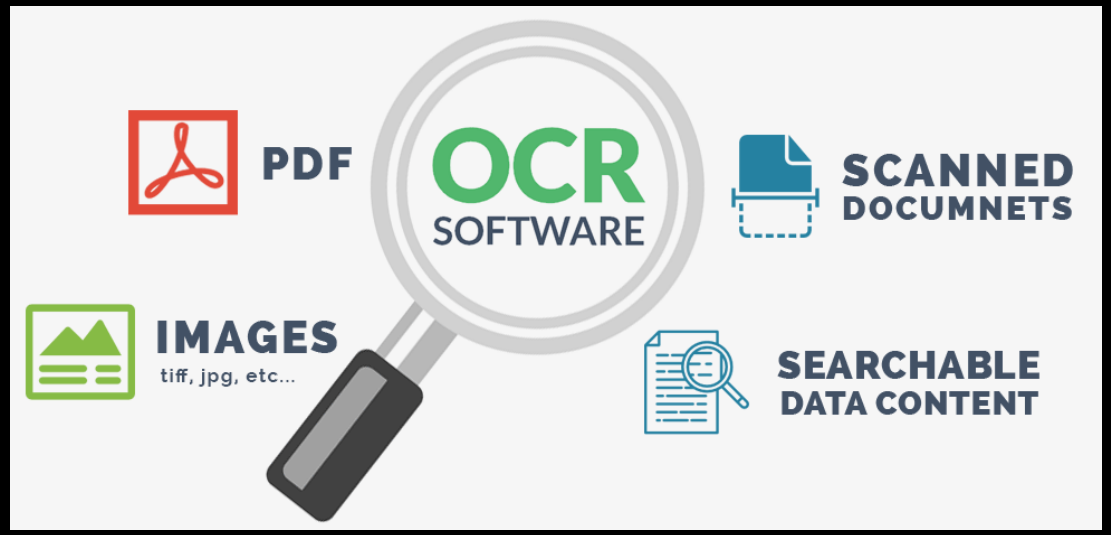
TOOLS for LIFE
Georgia's Assistive Technology Act Program

- JAWS
  - https://www.freedomscientific.com/products/software/jaws/
  - $1,000 or $90/year
- NVDA
  - https://www.nvaccess.org
  - Free/donation
- Dolphin ScreenReader
  - https://yourdolphin.com/products/individuals/screen-reader
  - $795

Optical Character Recognition

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- Several Options and Various Price Points
- Handwriting can be tricky



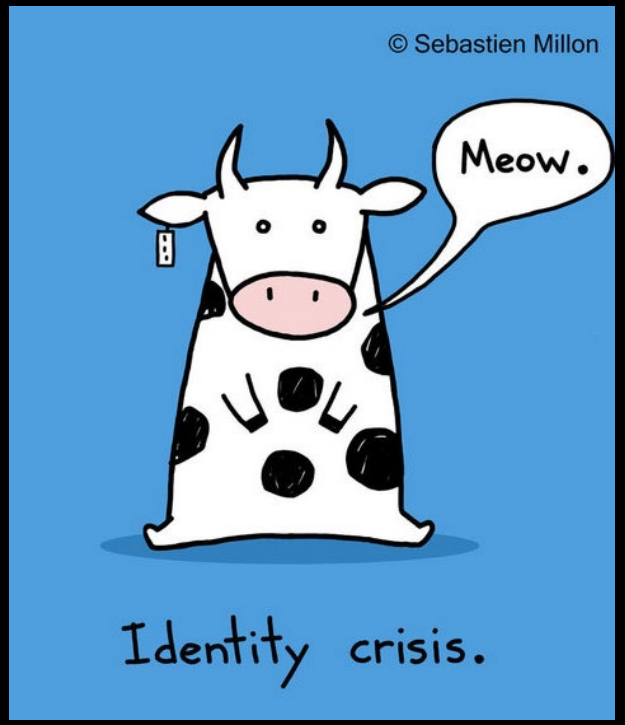
1. Seeing AI - Free (multi-function)
2. KNFB Reader - $99
3. Office Lens - Free (great for students)

Apps for Identification

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Using your camera to get descriptions

1. TapTapSee - Free
2. Google Goggles - Free
3. CamFind - Free
4. Seeing AI - Free



TFL App Finder Database

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Search by:

- Price
- Category
- Operating system
- Free!

www.gatfl.gatech.edu

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Questions?

Accessibility On the Go

TOOLS for LIFE
Georgia's Assistive Technology Act Program

TOOLS for LIFE
Georgia's Assistive Technology Act Program

iOS

Features for Users with Low Vision

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- Zoom
- Magnifier
- Display Accommodations
- Dynamic Text

Screen Accommodations

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- Invert colors
- Color filters
- Reduce white point

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Android

Visual Access

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- Text manipulation (large font, font style, high contrast)
- Color manipulation (features for color blindness, inverted colors, color filters)
- Navigation of the screen (color IDs, button shapes, keyboard options, large pointer)

Funding Resources

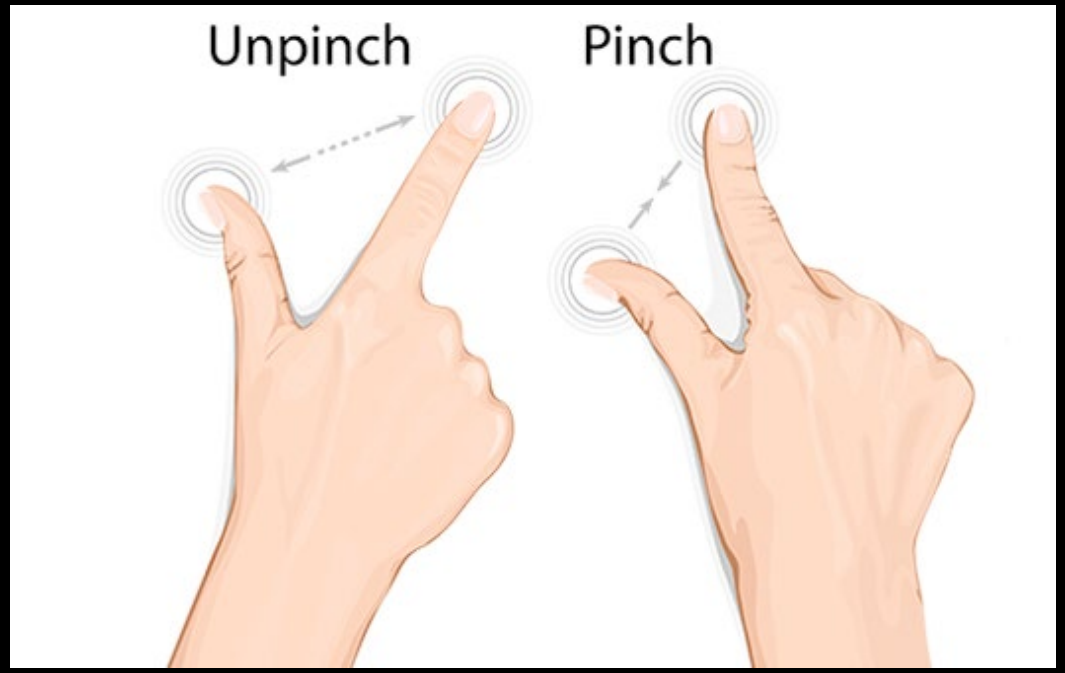
The Association of Blind Citizens
Can cover up to 50% of the cost of a vision device
www.blindcitizen.org

Credit-Able, Georgia's Alternative Financing Program
Low interest loans for Georgians with disabilities
www.cfiiga.org

Georgia Vocational Rehabilitation Agency
Supports and services centered around employment
https://gvs.georgia.gov

Magnifier

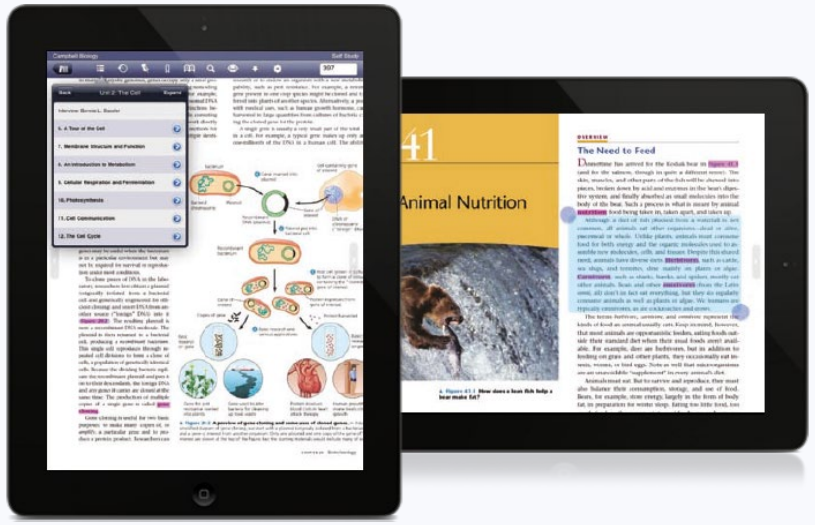
- Two options
  - Magnifier box
  - Full screen
- Full screen is easy to activate once selected in the accessibility (1 finger triple tap, maneuver with two fingers)
- Magnifier box can be moved around with two fingers



Don’t Forget Alternate Formats

TOOLS for LIFE
Georgia’s Assistive Technology Act Program

NATIONAL FEDERATION OF THE BLIND
NEWSLINE®
Live the life you want.

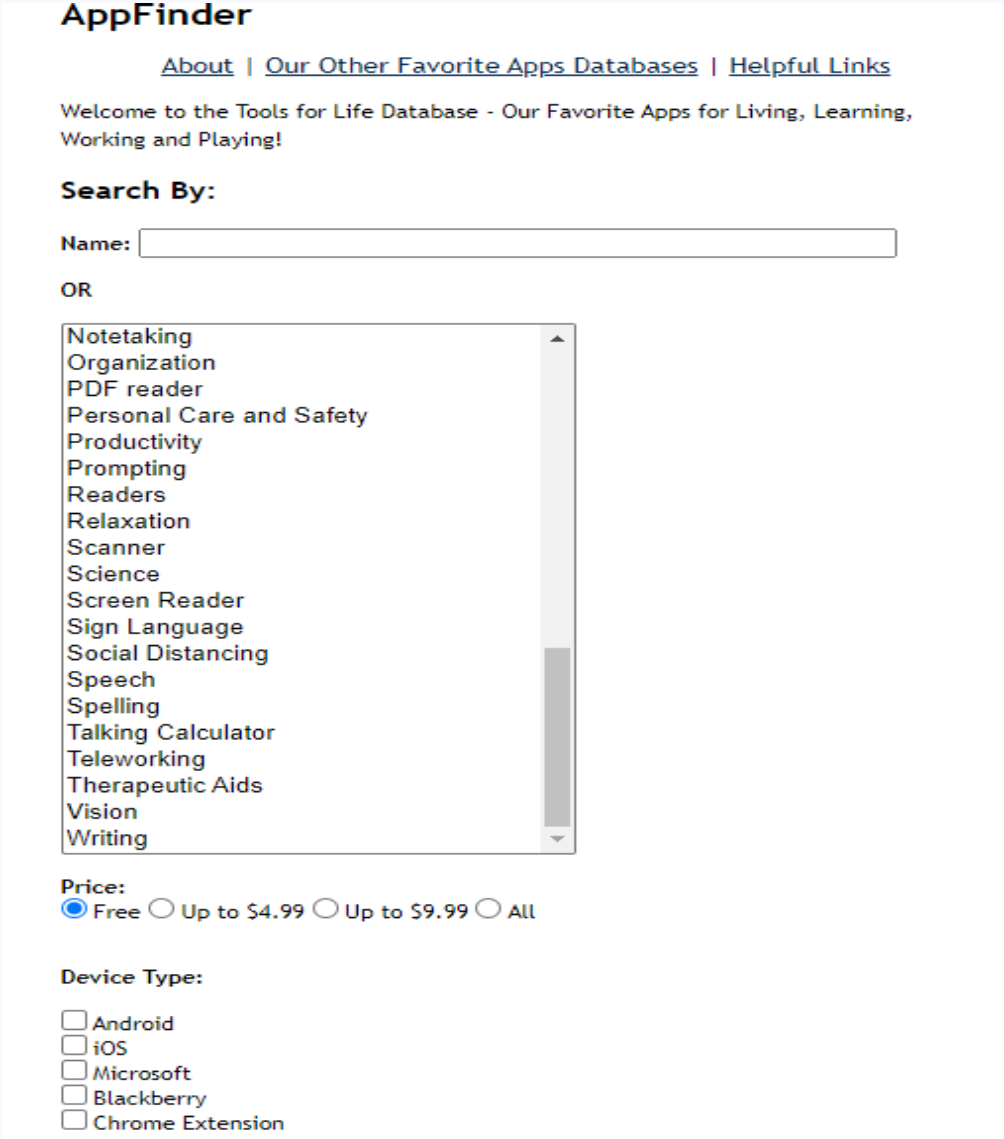


Tools for Life AppFinder

TOOLS for LIFE
Georgia's Assistive Technology Act Program

- Recently updated!
- Search By:
  - Categories
  - App Name
  - Device Type
  - Price

https://gatfl.gatech.edu/favorite-search.php



AppFinder

About | Our Other Favorite Apps Databases | Helpful Links

Welcome to the Tools for Life Database - Our Favorite Apps for Living, Learning, Working and Playing!

Search By:

Name:

OR

Notetaking
Organization
PDF reader
Personal Care and Safety
Productivity
Prompting
Readers
Relaxation
Scanner
Science
Screen Reader
Sign Language
Social Distancing
Speech
Spelling
Talking Calculator
Teleworking
Therapeutic Aids
Vision
Writing

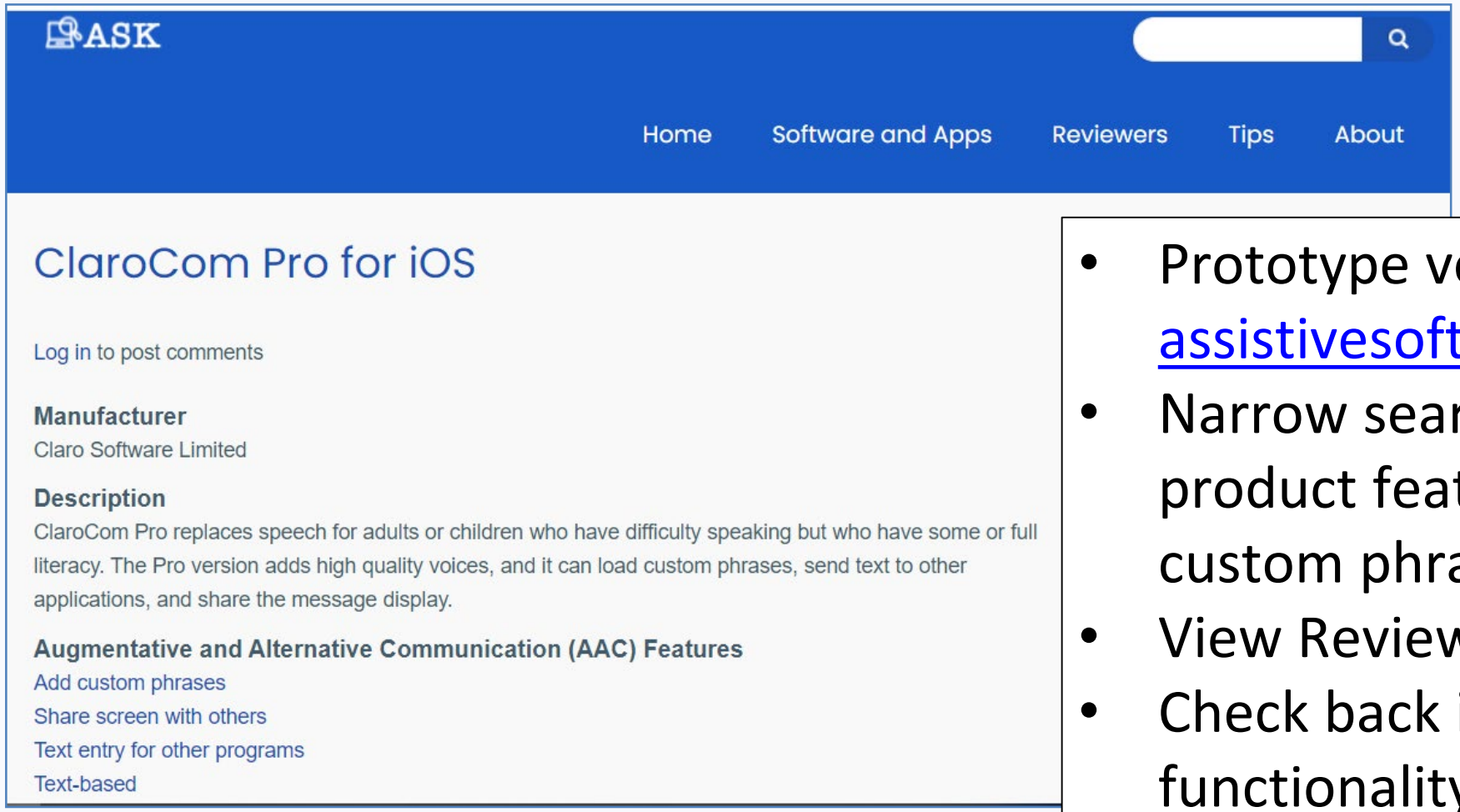
Price:
Free Up to $4.99 Up to $9.99 All

Device Type:

Android
iOS
Microsoft
Blackberry
Chrome Extension

Assistive Software Knowledgebase

TOOLS for LIFE
Georgia's Assistive Technology Act Program



- Prototype version: assistivesoftware.gatech.edu
- Narrow searches by different product features (e.g., add custom phrases).
- View Reviews, User Tips
- Check back in October for more functionality.

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Questions?
Comments?

Tools for Life Team

TOOLS for LIFE
Georgia's Assistive Technology Act Program

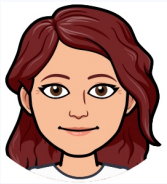
Carolyn Phillips
Director, Tools for Life
carolyn.phillips@gatfl.gatech.edu

Liz Persaud
Program and Outreach Manager
liz.persaud@gatfl.gatech.edu

Danny Housley
AT Acquisition Manager
danny.housley@gatfl.gatech.edu

Martha Rust
AT Access Team Manager
martha.rust@gatfl.gatech.edu

Gina Gelinas
Educational Outreach Manager
ggelinas3@gatech.edu

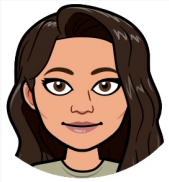


Rachel Wilson
AT Specialist
rachel.wilson@gatfl.gatech.edu

Tori Hughes
Outreach Specialist
tori.hughes@gatfl.gatech.edu

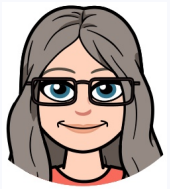
DeeDee Bunn
Speech-Language Pathologist
dbunn6@gatech.edu

Sam Peters
Program Specialist
speters37@gatech.edu



Ciara Montes
AT Specialist
ciara.montes@gatfl.gatech.edu

Ben Satterfield
Research Associate
rsatterfield8@gatech.edu



Sarah Endicott
Research Specialist
sarah.endicott@design.gatech.edu

Annabel Joyner
AT Lab Specialist
ajoyner8@gatech.edu

Sal Kibler
AT Services Intern
mkibler3@gatech.edu

Contact Us

Tools for Life, Georgia's Assistive Technology Act Program

Center for Inclusive Design and Innovation (formerly AMAC Accessibility)

Georgia Institute of Technology

1-800-497-8665

www.gatfl.gatech.edu

info@gatfl.gatech.edu

facebook.com/gatoolsforlife

@tools4life_at

@tools4life_at

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, Center for Inclusive Design and Innovation (formerly AMAC Accessibility) 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.