Exploring the Android System

Martha Rust
Tools for Life
www.gatfl.org

www.amacusg.org
Agenda

• Take a Look at Tools for Life and the Network
• Learn about the Tools for Life AppFinder
• Understanding Android Tablet and Mobile Device Accessibility
• Exploring Some Android Apps
• Sharing Your Favorite Apps
• Q&A

For Handouts: [http://www.gatfl.gatech.edu/tflwiki](http://www.gatfl.gatech.edu/tflwiki)
On February 1, 2012 we joined:
AMAC @ Georgia Institute of Technology
www.amacusg.org
AMAC Accessibility is a social change organization on a mission to create affordable services for governmental, private and non-profits organization working with individuals with disabilities. Services include e-text, braille, captioning, assistive technology, office management software and consulting.
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](http://www.amacusg.org)
Tools for Life
Georgia’s Federal AT Act Program

• TFL developed Georgia’s Plan for AT
• We serve individuals of all ages & all disabilities in Georgia
  • Over 50,000 thru various activities throughout the year
• TFL Network
  • Assistive Technology Resource Centers
  • Lending Libraries
  • Training and Demonstrations
  • AT Reuse
  • AT Funding Education/Assistance and Resources
• Online Resources
  • [www.gatfl.org](http://www.gatfl.org) - 12,000 unique visitors a month
Tools for Life Network

- AT Lending Library
- AT Evaluations & Training
- AT Demos
- Resource and Assistance
- AT Funding Assistance
- DME Reuse
TFL AppFinder

Search by:

✓ App Name
✓ Categories

– Book
– Education
– Environmental Adaptations
– Hearing
– Cognition, Learning, Developmental
– Navigation
– Personal Care and Safety
– Productivity
– Communication
– Therapeutic Aids
– Vision
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 Demonstration
- AT Evaluations and Assessments
- AT Funding Options & Education
- Access to the TFL AT Lending Libraries
- AT & Durable Medical Equipment Reuse
- AT Training (Individual)
- AT Training (Groups)

2013 IDEAS CONFERENCE
2013 Institute Designed for Educating All Students Conference
June 3 - 6, 2013
Epworth by the Sea, St Simons Island

- Submit a Proposal
- Conference Website
- Exhibitor Details

WEBINARS

| APR 18   | Free for All Resources for Teachers and Students |
| APR 24   | Assistive Technology and Adapted Recreation: A Perfect Match |

Current Webinar Schedule
Webinar Archives

APP FINDER


AT ONLINE EXCHANGE

gTRADE eTRADE, Georgia’s Online Equipment Exchange.
encourages members to offer AT and DME for sale or donation to others who may benefit from using technology unneeded by others.
### My Favorite Apps

You searched for: Learning, Cognition, and Developmental

<table>
<thead>
<tr>
<th>Logo</th>
<th>Name</th>
<th>Category</th>
<th>Device</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Tango Video Calls" /></td>
<td>Tango Video Calls</td>
<td>Learning, Cognition, and Developmental</td>
<td>iOS</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="i-promt" /></td>
<td>i-promt</td>
<td>Learning, Cognition, and Developmental</td>
<td>iOS</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Dragon" /></td>
<td>Dragon</td>
<td>Learning, Cognition, and Developmental</td>
<td>IOS</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="iBooks" /></td>
<td>iBooks</td>
<td>Learning, Cognition, and Developmental</td>
<td>IOS</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="Say Text" /></td>
<td>Say Text</td>
<td>Learning, Cognition, and Developmental</td>
<td>IOS</td>
<td></td>
</tr>
</tbody>
</table>

No Ratings

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### APP FINDER

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

AT ONLINE EXCHANGE

*gTrade*
*Georgia's Online Equipment Exchange*

encourages members to offer AT and DME for sale or donation to others who may benefit from using technology not needed by others.
Android Tablets
Samsung Galaxy

- Download Accessibility Features
- 7 inch or 10 inch screen available
- Compatible with flash/ WIFI
- 8.0 coming out February 2013 in Europe
- 8.0 will have a better camera and use a SIM card for storage
- Starts at $199.99 but 8.0 may be more
Motorola XOOM

- Android System
- Must download accessibility features
- Compatible with Flash
- Camera
- Wi-Fi
- Uses micro SIM card for external storage
- Starts at $319.00
Microsoft Surface

- Windows 8
- Slim and has a USB port
- Moveable Tiles
- Built-in Accessibility
  - Speech-to-text
  - Narrator
- Thin pressure sensitive cover that doubles as a keyboard
- Starts at $499
Samsung Galaxy S4

- Air Gesture
  - sensor at the top of the device, allows you to answer calls just by waving your hand
  - browse through photo albums and web browser tabs by using left and right hand gestures

- Air View
  - preview photos in an album, for example, by hovering any one of your fingers a few centimeters above the screen

- Smart Stay and Smart Scroll
  - Uses your eyes
  - Pauses when you look away or continues to scroll following your eyes
CONSIDERING ACCESSIBILITY
## Comparing Tablets

**www.bluebugle.org - 12/17/2012**

<table>
<thead>
<tr>
<th>Property</th>
<th>Android</th>
<th>iOS</th>
<th>MS Windows</th>
<th>Amazon Kindle</th>
<th>Barnes &amp; Noble Nook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number and variety of tablets</td>
<td>Several</td>
<td>iPad &amp; iPad Mini</td>
<td>A few</td>
<td>Kindle Fire &amp; Fire HD</td>
<td>Nook HD</td>
</tr>
<tr>
<td>Operating System</td>
<td>Android (latest Jelly Bean)</td>
<td>Apple iOS 6</td>
<td>Windows RT &amp; Windows 8 Pro</td>
<td>Modified version of Android ICS</td>
<td>Modified Android ICS</td>
</tr>
<tr>
<td>Apps</td>
<td>Nearly 700,000 (including the ones not optimized for tablets specifically)</td>
<td>Total of 700,000, out of which 275,000 optimized for iPad &amp; Mini</td>
<td>Around 100,000 (including phone apps) of which most are plain junk.</td>
<td>Around 60,000 (from Amazon’s special app store for Android)</td>
<td>Around 10,000 (available from Barnes &amp; Noble store for Android)</td>
</tr>
<tr>
<td>Software Updates</td>
<td>As it becomes available on Google (for Nexus, directly, and for other manufacturers, as they become available)</td>
<td>Apple releases updates</td>
<td>MS releases updates</td>
<td>Amazon releases updates</td>
<td>BN releases updates</td>
</tr>
<tr>
<td>Interface</td>
<td>As designed by manufacturer (on Nexus line, the original unaltered Android interface)</td>
<td>Icons &amp; widgets designed by Apple similar to Mac OS</td>
<td>Metro style designed by Microsoft</td>
<td>Modified version of regular Android interface (known to be slightly better looking)</td>
<td>Modified Android (criticized for worse looks)</td>
</tr>
</tbody>
</table>
Android Tablets

- Accessibility features are not all built in
  - Talkback, Kickback, and Soundback
  - Gesture Feature in Jellybean
  - Eyes - free keyboard
  - IDEAL Web Reader for internet
  - No zoom or contrast right now
- What operation system is tablet running
  - Jellybean, Ice cream sandwich, Honeycomb, Gingerbread
- Google Play Store to buy apps
  - Must have Gmail address
  - Can use Amazon gift cards
- Not the best to use with someone who has low vision and/or blind or cognitive disabilities
android Access: Accessible Android apps and news for the Blind and Visually Impaired

Welcome to Android Access, your portal to information on accessible Android apps and programs for the blind and visually impaired. We're excited to be a part of the Android community, and look forward to your comments, feedback, and submissions. If you're new to Android, check out our Getting Started page. Keep up to date with the latest reviews and news by following @AndroidAccess on Twitter.

Browse by category

- (43) Arcade & Action
- (5) Books & Reference
- (12) Brain & Puzzle
- (3) Business
- (2) Casual
- (34) Communication
- (1) Education
- (18) Entertainment
- (1) Finance
- (7) Health & Fitness
- (5) Libraries & Demo
- (8) Lifestyle
- (16) Media & Video
- (22) Music & Audio
- (6) News & Magazines
- (1) Photography
- (30) Productivity
- (1) Racing
- (2) Shopping
- (13) Social
- (4) Sports
- (4) Sports Games
- (2) Tools
- (3) Transportation
- (9) Travel & Local
Accessible Android

Get Maximum Eyes-Free Use from Your Android Phone

To read these pages most efficiently with a screen reader, use heading level navigation.

- At Level 2 are post dates, archives, subscription info, recent tweets, Good Stuff (a collection of pages), and More Information on Android and Accessibility (a compilation of related links).
- At Level 3 are post topics and subtopics.

For a chronological list of posts, check the archive dropdown list, or use the Topic List link under the Good Stuff heading.

To submit a post, contact AccessAna.

Thursday, September 8, 2011

How can I better enjoy my HTC EVO Shift 4G With Sense UI and Gingerbread?

Contributed by Alex Hiironen

The HTC EVO Shift 4G from Sprint is an excellent Android phone, with hardware keyboard, physical navigational controller, and decent specs. One of its drawbacks, however, is the HTC Sense user interface. The Sense UI affects fewer of the phone’s applications than the Touchwiz overlay on some Samsung phones, but Sense does require users to find some extra know-how or workarounds for certain things: the accessibility option in settings, the unlock gestures, the stock launcher, the call answer/reject/end gestures, the in-call screen, and the Contacts, Messaging, Alarms, and camera apps. Don’t worry, most of this is still usable.

In this post, I explain how to work around the accessibility glitches in the HTC Sense...
You cannot post messages because only members can post, and you are not currently a member.

Description: Announcements and discussions about the Eyes-Free project whose focus is development of applications that provide eyes-free access to the Android platform.

⭐ Samsung Gravity smart t-mobile
I saw a tweet about this phone earlier. It's been announced but not yet released. The estimated release date is 06/08/2011. This phone has a slide out keyboard and is supposed to be available for under $100 with a contract. I didn't see if it was 4g, but it might be a phone of interest to some of you.... more »
By Gordon - 3:19am - 1 new of 1 message - Report as spam

⭐ The vOICe and Color Identification
I'm using the vOICe to identify colors. Generally speaking, it does a good job though it's better at giving me color approximations than precise colors. For example, it says that my aqua bedspread, sky blue throw pillow and green blanky are all cyan, and it says a canary yellow box is green or yellow green. I remember colors and the exercise of combining red, yellow, and blue in kindergarten well enough to understand that blue, aqua, and green are all on a continuum and that certain yellows (maybe not canary) can kind of sort of look green in certain lighting, so what the vOICe does makes sense to me.... more »
By Ana G - Jun 2 - 2 new of 2 messages - Report as spam

⭐ Seesmic
I have installed seesmic and added my twitter account. I don't see a way to add any more accounts. I wanted to add my facebook account. Is anyone else using seesmic? How do you add more accounts? Thanks for any help.
By Terra Syslo - Jun 2 - 1 new of 1 message - Report as spam

⭐ List of accessible apps?
Is there a list of apps that are known to be accessible or are themselves accessibility apps? I'm trying to put together a list of things I'll need to download when the time comes. Chris
By Christopher Bartlett - Jun 2 - 3 new of 3 messages - Report as spam

⭐ Calculator
Ok I've attempted to use several different calculators, but no luck. Can someone please let me know which one I need and maybe some tips on getting it working. Thanks.
By Christopher Bartlett - Jun 2 - 1 new of 1 message - Report as spam
Accessible Android Apps

- Big Launcher: icons look darker and text is larger
- Vlingo Virtual Assistant and iris. (alpha)- voice command apps
- Text to Speech Toy: Text-to-Speech
- Eyes-free keyboard
- IDEAL web reader
- Code Factory - Mobile Accessibility Suite for AT&T users
  - 12 different apps / 30 day free trial -$99
- www.androidaccess.net
Apps for Navigation
WalkyTalky

- Accessible navigation aid
- Periodically updates the status bar with your current location to the nearest street address
- Ability to input a destination and directly launch Maps Navigation in Walking directions mode
- Need to enable GPS when running this app
- FREE
**Favorite Navigation Apps**

- **Around Me**
  - Identifies where you are
  - Lists what is around you
  - View route to place from where you are
  - Add information to contact list

- **Talk and Drive Waze**
  - Operate your map applications simply by talking
  - Launch the application, say your destination
Navigon North America

• Voice guided directions for driving and walking
• GPS runs in background to save battery life
• Day and night modes
• Text-to-Speech
• Route Planning function
• $39.00 Apple
• $59.99 Android
HopStop

• Get detailed subway, bus, taxi, walking & biking directions along with official transit maps, a nearby station finder, and schedules in 100's of cities throughout the US, Canada & Europe
• Biking routes available
• See how many calories you have burned
• Wheelchair and stroller accessible routes
• Works with Voiceover
Apps for Sensory/Hearing
BrailleTouch

• Prototype app for touchscreen mobile devices
• FREE Open Source app
• 32 words per minute with 92% accuracy with the prototype app for the iPhone
• Use of the six-key configuration so that the keyboard fits on the screen and users keep their fingers in a relatively fixed position while texting
• GA Tech Researchers

• Type with screen facing away
• Braille like typing
Darwin Wallet

- Uses the camera to determine the currency
- Hold the bill in front of the phone's camera and the app will speak its value
- Free
ScanLife Barcode and QR Reader

- Barcode and QR Reader
- Save all your QR Code & UPC scans in your History
- Free
Magnify

• FREE
• Turns Android phone into a digital magnifying glass with built-in flashlight
• Can use gestures anywhere on the screen:
  – Double-tap: Zoom out/in
  – Single-tap: Focus
  – Long-press: Turn light on/off
Ultra Magnifier

• Turns Android Phone into an FlashLight Ultra Magnifying Glass with fullscreen by using camera zoom and auto-focus
• To get the most of the application, place your phone’s camera 10 cm away from an object to gain perfect focus
• Support Negative color, Negative Sepia, Negative Mono, Negative Aqua, Negative Solarize effect
• Free
Hearing Saver

- Operates in the background to protect your ears automatically
- Simple way to avoid accidentally hurting your ears when plugging in or unplugging your Android device's wired or bluetooth headset
- Does take time to set-up
- FREE
Speaker Boost

- Boost your speaker or headphone sound volume
- FREE
Apps for Writing
MessagEase Keyboard

- Keyboard has large letters
- Change the colors
- Type using a Swype gesture
- Change the keyboard layout
- Lookup dictionaries to find the right spelling.
- Change the size, shape, haptic feedback
- FREE
Dragon Dictation

- Voice Recognition
- Free
- Dictate notes, emails, Twitter, and Facebook
- Supports many languages
- Cut, Copy, Paste
- Android
  - Dragon Go!
  - Dragon Hands Free Assistant
ColorNote Notepad
Notes To Do

• Simple notepad app
• Organize notes by color
• Checklist for To do list & Shopping list
• Checklist to get things done
• Organize your schedule in calendar
• Password Lock note
• Free
Apps for Reading
• Enable users to install over hundreds of fonts to their device for better reading
• Must have root access
  – Privileged control to change system
• Once the font is changed it will change globally
• FREE
Classic Text to Speech Engine

- Reads aloud texts from e-books, navigation, translation and other apps
- Reads a notification containing the caller / sender's name, and read the content of an incoming call / sms / mms / email
- Reads aloud pdf documents
- FREE
Go Read

- **FREE** accessible e-book reader for people with print disabilities
  - Android 2.2 Froyo and above
- Access and download books directly from Bookshare
- Read with voiced navigation and text-to-speech
- Read books in DAISY 3 text and EPUB 2 formats
FBReader TTS+ Plugin

- Free
- eBook Reader
- Text-To-Speech plugin for FBReader for Android
- Can highlight whole sentences or paragraphs
- Change settings for voice and download voices
Reading Apps

• Learning Ally
  – DAISY
  – Membership required
  – over 75,000 audiobooks, audio textbooks, and other recorded books

• Audible.com
  – Over 100,000 titles
  – Works on both Android and Apple
  – $7.00-$22.00 per month
Apps for Organization/Memory
Easy Reminder

- Set alerts to remind you about unread messages or missed calls
- Notification is configurable
  - decide a time slot during which you will not be disturbed
- Free
• Free
• Keep track of your cash and credit cards
• Pay your bills
• Real-time alerts and reminders about upcoming bills, overage charges, and suspicious transactions
• Understand your debt
**Scan Genius/ Genius Scan**

- Free on Apple
- $1.99 on Android
- Pocket Scanner
- Quickly scan documents on the go and email the scans as JPEG or PDF
- Allows you to build PDFs
Apps for Writing and Reading
Voice Note Trial

- Create lists, texts, email, notes, calls, and dial by voice
- Can use Google Voice Recognition when connected to internet
- Free
Talk Text to Voice

- Convert text to voice using the Text-to-speech engine on your smartphone
- Allows importing web pages directly from the browser to listen to them
- Can also import selected text from other apps
Apps for Math
Talking Calculators

Simple Talking Calculator
- Can do percentages
- Square-root
- Square and Cube
- Big buttons

Talking Calculator HD
- Hear numbers on the screen
- Works for someone who may have a vision loss
What are your Favorite Android Apps?
Questions
Contact

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Assistive Technology Specialist
Martha.Rust@gatfl.gatech.edu