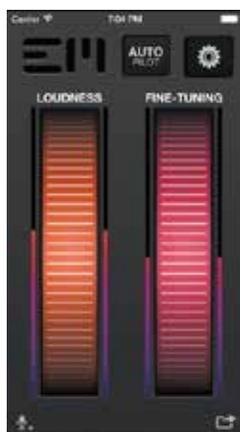


Make Your Smartphone Even Smarter

By Stephen O. Frazier



If you're of a certain age, hearing the words "get smart" will make you smile. If you are any age and have both a hearing loss and a smartphone, "get smart" is how to educate you and your phone. Smartphones have allowed us a degree of freedom and communication access undreamed of in the not too distant past.

Caveat: While I have tried out most of these apps, I have also relied on developer descriptions and reviewer feedback that I researched online. Also, not all apps are available for both iOS and Android (which is the operating system I use on my phone), and while many are free or low cost, both are ever changing, as is the technology itself. Look for these apps by name online for the latest.

SPEECH TO TEXT

Google's Live Transcribe is just one of many apps that transcribes spoken audio into text on your smartphone. This app goes one step further and also reports many of the background sounds you hear and how loud they are in relation to the speech it is transcribing. It supports 80 languages and will save a transcript of the conversation for up to three days. Use it with your favorite TV show and you'll see it's much faster and more accurate than the captions the show provides. Other options are **Speechy**

that converts speech to text and also translates that text into a different language, and **Otter.ai** that can be used with Zoom to transcribe meetings—or any event where there are multiple speakers, such as the dinner table.

For voicemail to text, the **Rev** voice recorder transcribes your voicemails so you can save and read them and organize the recordings (unlike the voicemail transcript that Apple smartphones already offer).

YouMail is actually best known as a popular option for blocking robocalls but it also offers a voicemail to text feature that is cloud-based, so you can see your voicemail messages on any device.

PERSONAL SOUND AMPLIFICATION DEVICE

Keep a neckloop or earbuds handy and you can turn your smartphone into a "pocket talker" to amplify sounds you want to hear with **EarMachine**, which, in addition to volume control, has a fine-tuning feature that lets the user control which frequencies get boosted, a little or a lot. Similarly, **ExSilent** has individual controls for each ear for both volume and tone.

Many volume boosters exist, including **Max Volume Booster** and **Sound Amplifier**—just be careful about overdoing it and damaging your hearing!

SOUND LEVEL METER

The general rule of thumb is, if you need to shout at your friend an arm's length away to be heard, it's too loud. These apps let you measure decibel levels using a variety of sound level meters. The National Institute for Occupational Safety and Health collaborated with EA LAB to create the **NIOSH Sound Level Meter** for use at worksites as well as during leisure time.

SoundPrint functions as a sound level meter but then allows you to share the venue's decibel measurement in order to crowdsource a Quiet List, identifying restaurants and bars in major U.S. cities that are less noisy. You can also distinguish between indoor and outdoor dining when sending in a measurement.

SAFETY ALERTS

If you've ever missed a smoke alarm going off in another room, check out **Sound Alert**. This device can alert you via notifications, vibrations, and flashing lights on your smartphone or tablet when any pre-programmed sound goes off in the house such as a smoke alarm, doorbell, phone ring, or microwave ding.

My SoS Family connects to a "first responder" family and friends list that keeps them informed in an emergency. Contacts are alerted instantly via the app, not your phone (faster and it frees your phone). It calls and texts your emergency contacts, even if they do not have the app, and the number of contacts is unlimited. The alerts designate your location using Apple's Find My Device feature.

HEARING TEST

The **Mimi Hearing Test**, a medical product from the European Union, serves as a preliminary online hearing test only—you'd have to follow up with a professional after this initial screening. Using a six-minute hearing assessment, the results indicate each ear's hearing capacity and show how the user's hearing ability compares to others in their age group.

BACKGROUND NOISE ERASER

Using earbuds or a neckloop and the telecoil (T-coil) setting on hearing aids, **Chatable** can erase most of the background sound in an environment by using a new approach to the problem. Chatable identifies the voice of the person speaking and, using what's called end-to-end neural speech synthesis, creates a new audio signal that sounds almost identical to the original and removes (rather than filters) the background sounds.

STREAMING AUDIO

Here's another free app that may interest the hearing as well as the hard of hearing. Streaming audio via WiFi is the

latest entrant in the battle for assistive listening systems in public places. The catch with it is that each place may require a different app on your smartphone. **MYE Fitness Entertainment** is integrated into leading health club mobile apps including Gold's Gym, Planet Fitness, 24 Hour Fitness, and many more. It may also be the app used in sports bars to hear the TV. To hear the streamed audio, you can use Bluetooth connected to your hearing aids, or the hearing aid T-coils and a neckloop.

Tunity allows users to hear live audio from muted televisions. Through patented deep learning and computer vision technology, Tunity identifies a live video stream and its exact timing, syncing the audio with the user's mobile device. It is used by people at bars, restaurants, gyms, waiting rooms, airports, and even at home. You can hear with your smartphone connected to hearing aids or earbuds that support Bluetooth, or the ever faithful T-coil/neckloop combo.

Just point your smartphone's camera at the TV screen and snap a picture. Without giving any additional clues like a time zone, channel, program title, or anything other than that photo, Tunity will search for your show and when found it will stream the audio to your hearing aids. I thought to myself there'd be no way it would work but amazingly, it mostly did—after a few tries and misses, and sometimes the app believing a show was still on when it had ended. You can sync the sound to be better in time with the person speaking. I'm now a believer!

With so many of these apps installed, my smartphone is smarter than ever, maybe even genius level. —



Trained by the Hearing Loss Association of America as a hearing loss support specialist, New Mexico resident Stephen O. Frazier has served HLAA and others at the local, state, and national levels as a volunteer in their efforts to improve communication access for people with hearing loss. For more, see sofnabq.com and loopnm.com.

Share your story: Tell us your favorite apps for managing hearing loss at editor@hhf.org.

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