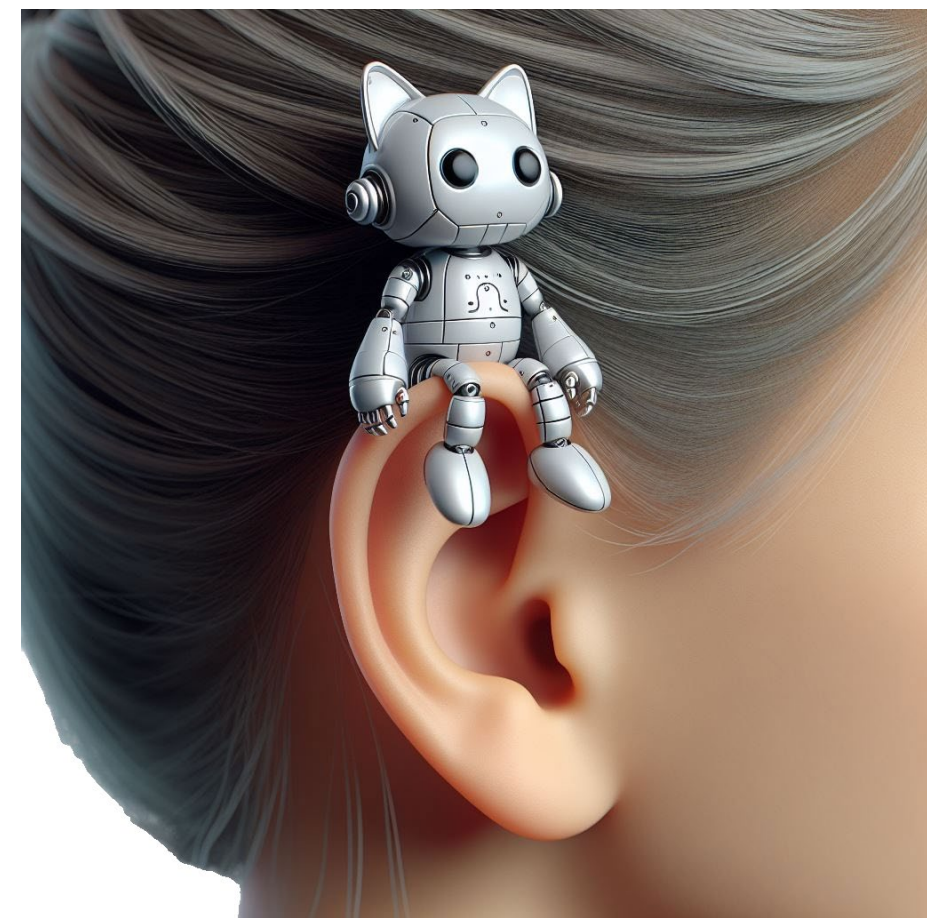


Assistive Technology Is Worthless If It Is Not Accessible

Elizabeth Ericksen - Foothill College



Two little robots sit on my ears during most of my waking hours. For some of our interactions the three of us must communicate through an intermediary: an app on my Bluetooth paired smartphone.



Assistive technology is increasingly reliant on unreliable connectivity.

Many features rely on Bluetooth connection, which often fails due to:

- Smartphone software updates
- Hearing aid firmware updates
- Interference from other devices
- Switching from WIFI to cellular data

Device reconnection can be an almost 20-step process that requires tech savvy users.

Bluetooth reconnection should not be difficult or time consuming for hearing aid users.

Connectivity issues become **accessibility** issues.

The consequences of these failures are:

- Inconvenient
 - Conversations are difficult to hear
 - Music stutters and lags
 - Cannot optimize for environment
 - Health tracking features don't work
- Frustrating
 - Hearing aids get out of sync with each other, causing reverb effect
- Dangerous
 - Disconnection while driving means access to navigation aid is lost
 - Unreliable features like fall detection give false expectations of safety

Inaccessible features, no matter how wonderful, do no one any good.

Reliability, Availability, Serviceability, Accessibility

When designing new technologies, developers need to:

- Recognize that most users lack the background to navigate tech hiccups
- Employ non-tech-savvy testers before product rollouts
- Coordinate software updates that affect device connectivity
- Remember that people rely on their products to work when needed

Assistive tech must be: Reliable, Available, Serviceable, and Accessible.