U-verse® Easy Remote App

Connecting Your World
Imagine having your own customizable TV remote that listens and responds to your commands, allows you to add favorite functions and even recognizes gestures. Through AT&T’s U-verse® Easy Remote app this is possible. It features more than 50 powerful and user-friendly features, like customizable screen displays and gesture commands, to help users quickly navigate to their favorite channel. Powered by AT&T Watson℠ speech recognition technology through the AT&T Speech API, the app not only recognizes voice input, but also will learn and adapt to individual speaking tendencies. The U-verse Easy Remote app harnesses the power of the AT&T network to better and more intuitively connect our customers to U-verse TV, ultimately simplifying their lives.

How did the idea hatch?
Developed collaboratively by AT&T Labs and AT&T Home Solutions marketing, the project began with a basic observation from Labs researcher Harry Chang, “Two of the most important questions people ask themselves when they come home every day are, ‘what’s for dinner?’ and ‘what’s on TV tonight?’” Since speech is the most natural way for humans to interact, AT&T innovators set out to find a way to help people communicate with their television set in the same fashion. In addition, they sought to design a remote app that would make it easier for the elderly and those with vision loss to see and operate their television.

The Future (art of the possible)
The U-verse Easy Remote app is currently available for download free of charge in the iTunes store. Moving forward, researchers will look to develop additional advancements that will further increase the accessibility of AT&T services, including:

- **Increased Accessibility.** This app is currently optimized for our accessible and senior customers, and further enhancements are underway.
- **Multiple Connected Devices.** While the U-verse Easy Remote app is currently available on the iPhone and iPad, AT&T Labs researchers are working to expand this technology to additional operating systems and devices.
- **Parental Controls.** Future advancements will allow customers to use voice and gesture commands to create a custom remote for children, allowing parents to set and monitor their children’s TV viewing patterns.
- **Custom TV Guide.** Searching through long lists of television programs can be a pain. In the future the U-verse Easy Remote app will remember television preferences and recommend programs based on the user’s interests.

About the Researchers

Harry Chang, lead member of technical staff at AT&T Labs, is an IEEE senior member and has received 20 patents over his 26-year career in the R&D fields related to speech technology. Some of Chang’s areas of expertise include speech recognition, natural language processing and multimodal user interface technology.
Michael Johnston, Ph.D., is a principal member of technical staff at AT&T Labs. He has more than 21 years of experience in speech and language technology and has worked at the forefront of multimodal interface research for 15 years. He is currently responsible for AT&T’s research program in advanced multimodal interfaces, holds 14 U.S. patents, has published over 50 technical papers, and currently serves as editor and chair of the W3C EMMA Multimodal standard.

Charles Galles, is a principal member of technical staff at AT&T Labs. He has more than 20 years of experience in speech and language technology in government and industry applications. He is currently a member of the team developing the AT&T Cloud Speech API’s.

Bernard Renger is a principal member of technical staff at AT&T Labs in Florham Park, NJ. His current interests include mobile video search, multimodal interfaces using speech and natural language, enhanced TV services, digital signage and social media. He joined AT&T Bell Laboratories in 1987 and AT&T Labs Research in 1999. Bernard currently holds 37 U.S. patents in the areas of telephony, Internet, wireless, speech and multimedia services.

AT&T Labs Executive Director of Technical Research Juergen Schroeter is one of the researchers behind the U-verse Easy Remote. In general, Schroeter’s team works on a variety of AT&T’s speech technology platforms, including AT&T Watson™ speech recognition technology and AT&T Natural Voices™ Text-to-Speech. Schroeter has received many awards in the area of speech technology, including an IEEE Fellowship for the creation and development of text-to-speech synthesis technology (TTS) in 2002 and the AT&T Science & Technology Medal for TTS in 2001.