Speech Accessibility Project begins recruiting people with ALS

By Meg Dickinson

The Speech Accessibility Project has expanded its recruitment and is inviting U.S. and Puerto Rican adults living with amyotrophic lateral sclerosis to participate.

Those interested in participating can sign up online.

Funded by Big Tech companies Amazon, Apple, Google, Meta, and Microsoft, the University of Illinois Urbana-Champaign aims to train voice recognition technologies to understand people with diverse speech patterns and disabilities. The project began recruiting people with Parkinson's disease last spring, and those with Down syndrome this fall. The project will also recruit people who have cerebral palsy or have had a stroke.

Researchers at UIUC's Beckman Institute for Advanced Science and Technology are securely recording participants and safeguarding their private information. So far, the project has shared more than 100,000 speech samples with the Big Tech companies, and the data will eventually be available to non-profits and companies who agree to safeguard participants' privacy.

"Just like human listeners, AI listeners do better when they have some experience with the type of speech they're listening to," said Mark Hasegawa-Johnson, a professor of electrical and computer engineering who is leading the project.

Harnessing voice recognition technology has the power to change lives, he said.

"Stephen Hawking, the physicist, continued his research for decades after he became nonvocal by using an automatic speech synthesizer to communicate on his behalf. Many people with ALS now follow Hawking's lead, learning how to use speech synthesis as a communication tool so that they will be able to communicate with loved ones even when their voices become less intelligible," he said.

"The Speech Accessibility Project seeks to make it possible for people with ALS to communicate using their own voices as long as possible by training automatic speech recognizers to understand voices that have reduced intelligibility because of advancing symptoms of ALS," he said.

Team Gleason, which serves the ALS community through a broad range of programming, assistive technology, equipment, and robust support services, shares the goal of this effort to expand the usefulness of speech recognition tools.

"Team Gleason strives each day to provide the best available assistive technology for the ALS community while simultaneously exploring ways to advance future solutions," said Blair Casey, executive director for Team Gleason.

"Technology has the ability to overcome communication barriers and increase independence. Team Gleason is proud to help accelerate this effort for people living with ALS and anyone else with speech differences. Team Gleason's involvement in the Speech Accessibility Project will positively impact millions of people globally whose speech may be challenging for others to understand."

Participants and caregivers will be compensated for their time in the form of Amazon eCodes. Participants will receive a total of $180 in three increments: $60 after recording the 200th sample, an additional $60 after recording the 400th sample, and an additional $60 after recording the 600th sample.

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