



TECHNOLOGY

SoundsRight CAPTCHA

OVERVIEW

Executive Summary

According to the Centers for Disease Control and Prevention (CDC), 61 million adult Americans live with a disability. Of those people, 4.6 percent (approximately 2.8 million) people are visually disabled. These vision impairments, including blindness, lead to difficulty when using computers. One common difficulty is the interaction with CAPTCHAs - online tests where users must pick images corresponding to what the test asks. Given their disability, visually impaired users cannot successfully pass a CAPTCHA test. This prevents them from being able to access these websites.

Researchers at Towson University have developed SoundsRight CAPTCHA, an audio CAPTCHA alternative to image CAPTCHAs that allows visually impaired users to access websites. The SoundsRight CAPTCHA presents a challenge in which the user is asked to identify a specific sound, such as a bell or a piano, each time it occurs within a series of 10 sounds. SoundsRight CAPTCHA has a success rate greater than 90%, compared to existing audio CAPTCHAs which have been shown to be unsuccessful more than half the time. SoundsRight CAPTCHA can help ensure that websites remain inclusive and accessible.

APPLICATIONS

- Website accessibility

ADVANTAGES

- Success rate 40% greater than existing audio CAPTCHAs

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Additional Information

INSTITUTION

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CATEGORIES

- Software + Algorithm

EXTERNAL RESOURCES

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