# 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.

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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

### **CONTACT INFO**

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## **Additional Information**

#### INSTITUTION

University of Maryland, College Park

#### CATEGORIES

• Software + Algorithm

#### **EXTERNAL RESOURCES**

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