

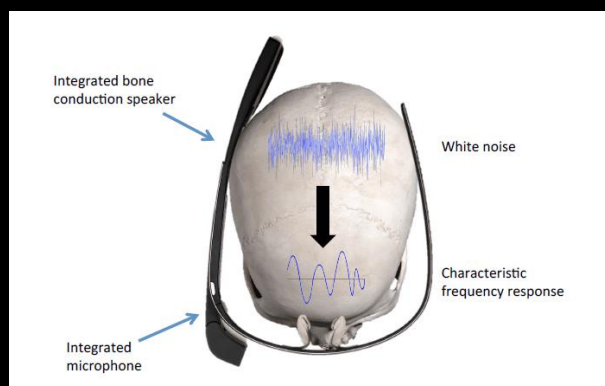
SKULL SOUNDS CAN REPLACE YOUR ONLINE PASSWORDS

What may appear to be eerie, may soon become a normal way to log into your online accounts. Researchers are working around the clock to be able to provide users to utilize the sounds of your skull in order to replace passwords.



While the investigation for the upmost perfect hack continues for the proof of access of a management tool is gaining reputation as time moves on, there are researchers progressing forward. We have seen typed passwords, fingerprint passwords, and even iris scanning password protection, in order to optimize our security access to limited viewers. And after upon several attempts of creating the most secured password possible, researchers are still progressing forward into studying the ears, heartbeat, and even brain scans. Now, we can see these extremely intelligent researchers optimizing the sounds emitting from your skull.

As of now, users have the ability to log into their computers, web sites, and even applications based upon facial recognition, fingerprint sensors, and even iris scanning methods. But as we dawn a new era in technology advances, a novel method unravels itself from the works in order to provide a new security confirmation of identity, the sound of your skull.



I didn't even know my skull had a sound, unless someone hit it.

In fact, the researchers at the University of Stuttgart, the University of Saarland, and even the Max Planck Institute for Informatics located in Germany are currently undergoing work upon a new system in which they label as "SkullConduct". This is a new form of authentication system that can utilize a bone conduction microphone and speaker that is located inside your head in order to properly identify you.

In fact, this new system can identify the exact way in which your skull "Vibrates" in a particular reaction from an ultrasonic signal. This is due to the fact it can be just as a unique identification as your very own fingerprint is. This simply states that it has the ability to be utilized as a type of form of biometric identification. And also, ultimately utilized in order to prove that you are you whenever you log into email clients, or gaining full access onto the Pentagon.



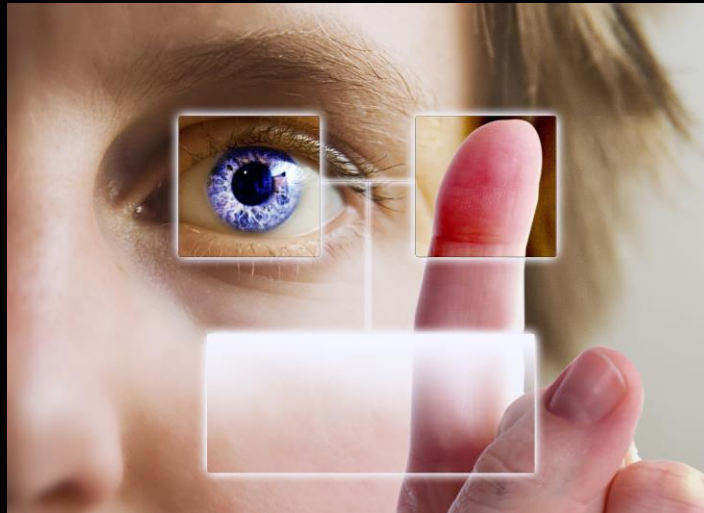
While only a very small team of 10 people has been tested upon the device, the researchers has learned that their system can in fact correctly identified their test subjects 97-Percent of the time. This is based upon the test subject's skull sounds alone.

The same researchers are also working onboard with Google's "Glass-Style" headset in order to completely measure the skull vibrations. This then allows the respective user to be able to log onto their favorite online services without the age-

long failed attempts of remembering passwords. During the early stages of the development process, the signs are extremely promising as it is able to capture the vibrations that are coming back to be able to work, depending upon who is wearing the device.

The researchers are also aiming to provide the technology onto smartphones, which then allows you to place your phone to your head and that is adequate enough for proper identification in order to answer calls.

This new SkullConduct has joined other various strange but wonderful biometric security solutions that are in current development. Other services are including vein patterns, as well as brain waves. The concept behind this is to create these biological markers in order to raise the difficulty level of providing false attempts. This is in comparison onto our traditional passwords in which are easily stolen or cracked/hacked.

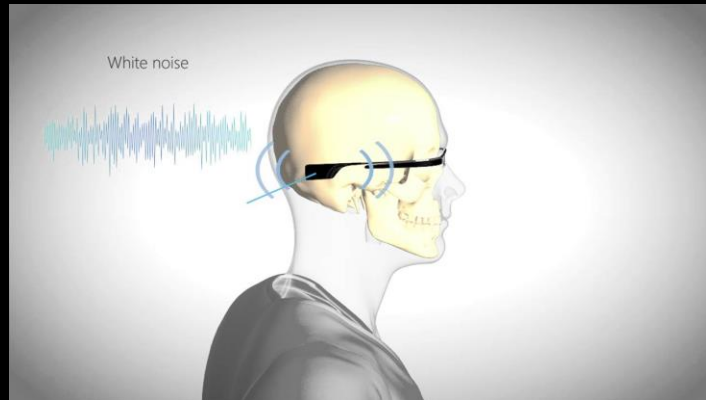


“If recorded with a microphone, the changes in the audio signal reflect the specific characteristics of the user’s head,” stated the researchers in a report onto the [Journal of the ACM](#).

Just like all great concepts, there are a few problems at hand for the SkullConduct to overcome before it is able to provide a positive viable proposition.

The first obstacle is the prototype. While the first prototype was in fact tested without a single background noise, they need to design it to work flawlessly in the system while the respective user goes about their everyday life. As this is the teams next obstacle to tackle. And secondly, the sound waves themselves. There are some

“White Noises” that can be extremely annoying to the respective users, and the team will be working on replacing the noise with a small section of a music or a nice jingle.



While the teams from all of the universities are working hard to overcome these minor obstacles, they are hoping to be presenting their invention of the details of the SkullConduct at the next [Conference for Human-Computer Interaction](#) that will be held in California sometime in May.

I can see this new technology becoming a standard for large important corporations as their employees can walk into a door without the usage of cards, or pin codes. Such companies may include Google, Facebook, Twitter, Netflix, Government Sectors, and so on. But only the future of unraveling technology will tell a tale for us in recent years to come.

RESOURCES: [TechWorm](#) { } [PERCEPTUAL](#) { } [CONFERENCE FOR HUMAN- COMPUTER INTERACTION](#) { }

This article (Skull Sounds Can Replace Your Online Passwords) is a free and open source. You have permission to republish this article under a [Creative Commons](#) license with attribution to the author and [AnonHQ](#)