

IDair has a fingerprint scanner from standoff distance

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Researchers are exploring better designs in biometrics to meet business and government demands for reliable identification and verification tools. Out of the many biometric technologies that continue to be works in progress, fingerprinting continues to be an accepted technique. Fingerprint-matching has been a mainstay in law enforcement but businesses now look toward fingerprinting systems for security management and access control. Other solutions such as flashing photo ID cards or licenses to confirm true identities of people passing in and out the doors have not been entirely reliable.

A new startup, IDair, wants to make the difference. Its new [fingerprint scanner](#) system can read fingerprints from up to six meters away.

The person waves hand to sensor for identification verification--no stops at checkpoints asking for a ID card; no fumbling around for lost keycards. The machine is described as a touchless scanner. The fingerprint can be photographically captured with enough detail to match

against a database. A selling point is that fingerprints are collected at a standoff distance so there is no need for people to touch a scanner pad, avoiding problems in accuracy compromised from dirt, grime, or oil on the finger.

The scenario is simple, in that the company places the scanner device on the door; the person sends prints to the system, which takes a snapshot when triggered and uses [pattern recognition](#), edge detection and sharpening to scan the fingerprint, which is then compared to the database. The system is described as close to the way satellites process ground images.

Joel Burcham, CEO of IDair, Clemson-trained with a PhD in physics, talked about his product plans recently at the HudsonAlpha Institute for Biotechnology. in Huntsville, Alabama, where he has a company office. Actually, IDair is a spin-off of Advanced [Optical Systems](#) (AOS), which focuses on government customers. While AOS takes on its government customers IDair is grooming commercial outlets for interest in biometric technologies. The company hopes to make a difference with its expertise in touchless sensors for easier identification and verification.

Currently, a 24-hour fitness center chain is beta-testing the IDair system. The chain wants to tackle access-key sharing by friends or roommates. Burcham also has a longer range vision for making his technology suitable in retail applications.

Meanwhile, the IDair basic product priced under \$2,000 processes only one finger's print. In biometrics, it is agreed that just one finger's print is good for certain applications but more may be required for increased levels of accuracy. IDair hopes to add sensors to the mix such as for face recognition and iris scanning, in a more comprehensive biometric system.

The company will also need to step over nothing-is-safe security qualms, actually privacy issues, among those who warn of the risk of any digital fingerprint database being leaked.

More information: idairco.com/products

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