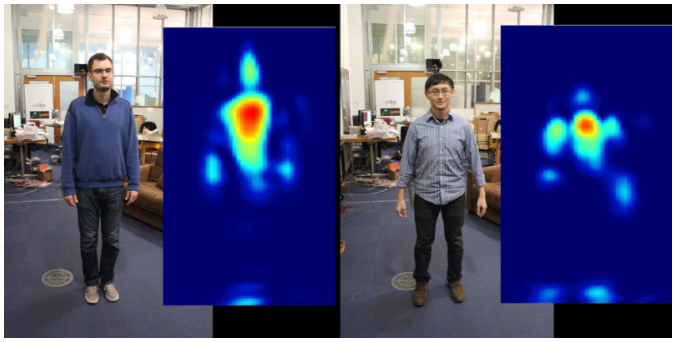
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Researchers at the MIT Computer Science and Artificial Intelligence Lab present a non-networking use for wifi-- as a means to see through walls, essentially making an X-ray vision of sorts.



Dubbed RF-Capture, the technology uses variations in wifi signals to recognise human silhouettes from behind walls. To do so it first transmits wifi signals before analysing reflections in the signals to piece together a human form. In other words, it is a little bit like a radar. It requires no wearable sensors and transmission power is "10000 times lower" than standard mobile phone signals.

The researchers say the technology (or rather, the algorithm behind it) is accurate enough to know who the person behind a wall is, determine how he or she is moving and even trace a person's handwriting in air, all by piecing together a silhouette from the reflected wifi signals.

RF-Capture is actually not a new technology-- the same team is the one behind "Wi-Vi," an earlier take on wifi-powered X-ray vision. First shown off in 2013, Wi-Vi could simply detect human presences from the other side of a wall, making RF-Capture a more refined progression on the concept.

The MIT team says the technology is perfectly safe, and is already working on real-life applications-- such as a device to monitor the houses of the elderly able to call emergency services in case someone falls over. It can also be used to gesture-control smart home systems and even do basic health checks, since it is already accurate enough to monitor breathing and heart rate.

In addition the team is working on privacy-ensuring measures, with blockers preventing the tracking of people except by their own device.

Go RF-Capture