

Greetings.

My name is Wael AbdAlmageed. I am a research scientist at USC's Information Sciences Institute (ISI). As you may be aware, biometric authentication is becoming mainstream technology that is used every day to provide easy access to mobile devices and secure buildings. Virtually all modern mobile devices, such as Apple iPhone and Samsung Galaxy include some form of a biometric authentication capability such as fingerprint sensor or even face camera. Unfortunately, current technologies are still prone to spoofing attacks, in which a person without access rights attempts to gain authorized access, using, for example, a fake fingerprint or a printed face image.

At USC ISI, we are developing both sensors and artificial intelligence algorithms and software that will make biometric authentication systems more robust and resistant to fingerprint, face and iris spoofing attacks. As part of this research, we are collecting a new, completely anonymized dataset of fingerprint, face and iris data using the new sensors. Some of the participants in this study will be asked to try to spoof (or fool) the systems using fake samples, such as printed face, a silicone fingerprint or a face mask (see Figure 1), while other participants will be asked to present true samples to the system.



*Figure 1: Fake face sample*

I am emailing to ask if you would like to take about 90 minutes to participate in this research project at ISI Marina Del Rey, CA offices. Participation is completely voluntary and your data will be completely anonymous. This project is NOT a recognition project and we are not attempting to infer identify from the biometric samples. This project is only about automatically deciding if a given biometric sample is real or fake. Participants will be paid \$30 for a successful data collection.

If you are interested in participating, please fill out the form in the following link. We will contact you directly to schedule time for participation.

<https://goo.gl/forms/HeMgVcwXaqzk6jJd2>

If you have any questions, please do not hesitate to contact me directly at [wamageed@isi.edu](mailto:wamageed@isi.edu). Please add the following to the subject line of your email: **[USC ISI Biometric Spoofing Study]**

Thank you for your time.

Wael AbdAlmageed, Ph.D.  
Research Team Leader and Senior Scientist  
Information Sciences Institute  
University of Southern California  
<https://www.isi.edu/people/wamageed/about>