

Measuring Face Recognition Accuracy of Humans, Forensic Examiners, and Algorithms

P. Jonathon Phillips
National Institute of Standards and Technology

4/19/2018 at 11:00 am
CBIM 22

Abstract

Over the last decade, NIST has systematically compared human and computer performance in tandem with competitions for face recognition algorithms. These comparisons provide a detailed look at human versus machine performance across multiple face recognition tasks. This effort measured accuracy of average human face recognition ability. Current research in human face performance is looking at the ability of face super-recognizers and facial forensic examiners. On the algorithm performance, the focus has moved to deep convolutional neural networks (DCNNs)-based face recognition algorithms. With the advance in DCNN algorithms, the comparison is now starting to compare algorithms and humans with superior face recognition ability.

Bio

face recognition. He is at National Institute of Standards and Technology (NIST), where he runs challenge problems and evaluations to advance biometric technology. His previous efforts include the Iris Challenge Evaluations (ICE), the Face Recognition Vendor Test (FRVT), the Face Recognition Grand Challenge and FERET. From 2000-2004, Dr. Phillips was assigned to DARPA. For his work on the FRVT 2002 he was awarded the Dept. of Commerce Gold Medal. His work has been reported in the New York Times, the BBC, and the Economist. He has appeared on NPRs Science Friday show. In an Essential Science Indicators analysis of face recognition publication over the past decade, Jonathon's work ranks at #2 by total citations and #1 by cites per paper. In 2013, he won the inaugural Mark Everingham Prize. He is a fellow of the IEEE and IAPR.

Faculty Host: Dimitris Metaxas