

Biometric Consortium 2006 Conference

Dr. P. Jonathon Phillips
Program Manager
NIST

100 Bureau Dr MS 8940
Gaithersburg, MD 20899
Phone: 301.975.5348
jonathon@nist.gov

Topic: Overview of FRGC and ICE

Abstract: New techniques in computer vision, algorithm design, and sensor design have the potential to reduce the error rate of face recognition systems by an order of magnitude over the Face Recognition Vendor Test (FRVT) 2002 results. The Face Recognition Grand Challenge (FRGC) was conducted to facilitate the development of these new techniques. The FRGC was a technology development program designed to improve face recognition performance by an order of magnitude. Preliminary results indicate that goal has been met. Techniques investigated were high resolution still imagery, 3D facial scans, and multi-sample still facial imagery.

FRGC compared machine and human face recognition performance. Experimental results show that machines are capable of out-performing humans. Additional experiments show that fusing humans and machines further improves face recognition accuracy.

FRVT 2006 began on 30 January 2006 and is currently underway with results expected in December 2006. It is the latest in a series of large scale independent evaluations for face recognition systems. There are 22 participants in the FRVT 2006 from 10 different countries—16 from industry and 6 from academia.

The Iris Challenge Evaluation (ICE) project is modeled after the FRGC and FRVT 2006. ICE 2005 is a technology development project for iris recognition, while ICE 2006 is the first large-scale, open, independent technology evaluation. The primary goals of the ICE projects are to promote the development and advancement of iris recognition technology and assess its state-of-the-art capability. The ICE 2006 commenced on 15 June 2006. ICE 2005 results will be presented.

Biography: Dr. Jonathon Phillips is a leading technologist in the fields of computer vision, biometrics, face recognition, and human identification. At the National Institute of Standards and Technology (NIST), he is program manager for the Face Recognition Grand Challenge and Iris Challenge Evaluation, and test director for the Face Recognition Vendor Test (FRVT) 2006. Dr. Phillips was DARPA program manager for the HumanID program. He was also test director for the FRVT 2002, for which he was awarded the Dept. of Commerce Gold Medal. His work has been reported in print media of record including the New York Times and the Economist. Dr. Phillips is an Editor for IEEE Trans. on Pattern Analysis and Machine Intelligence, and guest editor of an issue of Proceedings of the IEEE on biometrics.