

Biometric Consortium 2005 Conference



Austin Hicklin
Senior Principal
Mitretek Systems

3150 Fairview Park Drive
Falls Church VA 22043
Phone: 703.610.1995. hicklin@mitretek.org

Topic: Slap fingerprint segmentation evaluation (SlapSeg04)

Abstract: The FBI and DHS have recently announced the use of slap fingerprints (multiple-finger simultaneous plain impressions) for IAFIS Civil searches, and for US-VISIT checks. The Slap Fingerprint Segmentation Evaluation 2004 (SlapSeg04) was an assessment of the accuracy of algorithms used to segment slap fingerprint images into individual fingerprint images. SlapSeg04, conducted by the National Institute of Standards and Technology (NIST) on behalf of the Department of Justice's Justice Management Division, was the first rigorous evaluation of current slap segmentation algorithms has ever been conducted.

This session will summarize the findings of SlapSeg04, and will outline the issues involved in using slap fingerprints in large-scale identification systems.

Biography: Austin Hicklin is a Senior Principal with Mitretek Systems, in the Biometrics Group. Mr. Hicklin has nearly twenty years of experience in systems engineering and software design and development, projects dealing with biometrics, PKI, smartcards, Web development, user interface design, and financial and project management software. In ten years with Mitretek Systems (and the MITRE Corporation), Mr. Hicklin has focused particularly on biometrics, in projects for NIST, the FBI, the U.S. Department of Justice, and other government agencies.

Mr. Hicklin has had key roles in a variety of biometric evaluations and programs over the last decade. Mr. Hicklin recently had a defining role in the Slap Segmentation Evaluation 2004 (SlapSeg04), which is the first rigorous evaluation of slap segmentation algorithms yet conducted. Previously, Mr. Hicklin has been involved in a number of biometric projects, including the Fingerprint Vendor Technology Evaluation (FpVTE) 2003, an extensive evaluation of the accuracy of fingerprint matching; the IDENT/IAFIS Image Quality Study, which was critical in defining the effect of poor-quality fingerprints and the comparative performance impact of flat and rolled fingerprints; and the Universal Latent Workstation, which is the latent fingerprint processing software that is distributed by the FBI to Federal, State, and Local agencies and has been responsible for thousands of identifications.

Mr. Hicklin has a Master of Science degree in Computer Science from Virginia Tech, and a Bachelor of Arts degree from the University of Virginia.