National Institute of Standards and Technology

INTERNATIONAL BIOMETRIC PERFORMANCE CONFERENCE

Evaluation and Performance of Biometric Technologies

March 5-9, 2012

PROGRAM

National Physical Laboratory

Fraunhofer IGD

NIST, NPL and Fraunhofer IGD are happy to announce the agenda for the IBPC 2012 conference on performance and testing of biometric systems. The forum will bring together evaluators, users, technology providers to discuss performance in applications that embed biometric functions or component. The conference aims to detail developments in *how* systems are being tested, certified, upgraded and improved rather than to snapshot specific testing results. The conference specifically includes talks on Automated Border Control, a rapidly growing application of front-end and back-end biometric technology today, and emerging biometric uses. The talks will target operationally relevant and desirable themes, and will give emphasis to design, procurement, and what operators require from test and evaluation activities. The conference aims to advance future use of biometrics by sifting salient points from the accumulated experience of the last decade, to identify novel evaluation methodologies and recent trends in testing, and to determine what is most operationally relevant in the context of the contemporary and emerging marketplaces.

Program Committee:
Patrick Grother, Elham Tabassi, NIST, US
Tony Mansfield, NPL, UK
Christoph Busch, Fraunhofer IGD, DE

Speakers:
Research and development staff, system analysts, users, evaluators, planners, writers of technical specifications, standards developers and adopters.

Target audience:
Professionals concerned with biometric system evaluation, procurement, deployment, maintenance, design, configuration, integration, standardization, research and development.

Homeland Security Science and Technology

US-VISIT Keeping America's Doors Open and Our Nation Secure

Satellite Workshop I, March 5	Main Conference, March 6-8	Satellite Workshop II, March 9	Satellite Workshop III, March 9
Technical update on the second generation NIST Fingerprint Image Quality Algorithm	IBPC 2012 Conference	Artefact, Liveness, Suspicious Presentation Detection	Voice Biometrics Data Standardization for Law Enforcement, Military and Homeland Security
Portrait Room, NIST	Green Auditorium, NIST	Portrait Room, NIST	Heritage Room
13:00 – 18:00		09:00 – 12:00	09:00 – 16:30

Registration	**https://www.fbcinc.com/nist_IPBC/atreg1.aspx**
Hotels + Logistics	**http://www.nist.gov/itl/iad/ig/ibpc_logistics.cfm**
Maps + Directions	**http://www.nist.gov/public_affairs/visitor/index.cfm**
IBPC 2012 Homepage	**http://biometrics.nist.gov/ibpc2012**

Registration Deadline: March 1, but attendees who are not U. S. Citizens or Permanent Residents must register on or before February 26

	IBPC 2012 - Tuesday March 6		IBPC 2012 - Wednesday March 7		IBPC 2012 - Thursday March 8
	0800 Continental Breakfast		0800 Continental Breakfast		0800 Continental Breakfast
	0830 Introduction, overview, goals, logistics		0830 Review of day 1, polls, question and answer		0830 Review of day 2, polls, question and answer
	0840 NIST Welcome, ITL Laboratory		0845 Jim Wayman, San Jose State University, Keynote on Testing Trajectories		0845 Rick Lazarick, CSC, Patricia Wolfhope, DHS S&T, Initiatives Toward Re-usable testing
Government	0850 Nick Megna, Federal Bureau of Investigation, CJIS Division, NGI Program Initiatives	Government	0925 Will Graves, DHS US-VISIT, Update on IDENT and US-VISIT Activities	Mobile	0910 Eric Kukula, Noblis, Towards a Mobile Biometric Test Framework
Government	0925 Bill Casey, Federal Bureau of Investigation, Biometrics Center of Excellence, BCOE Program Overview	Government	0945 Srikanth Nadhamuni, UIDAI, Very Large Scale Multimodal Testing Methods + Results for India's UID System	Mobile	0935 Raul Sanchez-Reillo, Uni. Carlos III, Migrating Biometrics to Mobile Scenarios: Performance and Usability Evaluation
Government	0950 Raj Mashruwala, Scenario Testing of Mobile Fingerprint Verification System	Government	1020 Mark Branchflower, INTERPOL, The INTERPOL Gateway and Forensic Developments for 2012		1000 George W. Quinn, NIST, Plans for the IREX IV Activity Supporting Iris Identification
	1015 Craig Watson, NIST, FPVTE 2012, Plans for NIST's Upcoming 1:N Fingerprint Evaluation		1035 Patrick Grother, NIST, FRVT 2012, Plans for NIST's Upcoming Face Recognition Evaluation		1005 Elham Tabassi, NIST, NFIQ 1 → NFIQ 2: An update
	1017 Break		1037 Break		1025 Break
Face + Automated Border Contorl	1045 Fares Rahmun, BVA, National Preparations Towards the Operation of the European Visa Information System (VIS)		1105 PANEL, Tests to Support Commercial Adoption. Tests + Standards Enable Fair Competition. Tests of Privacy Enhancing Technologies. Tests for Certification.		1055 Narishige Abe, Fujitsu, Evaluation of Minutiae Reproducibility for Seasonal Variation, AND Performance Evaluation for Touch- and Sweep-type Sensor Verification
Face + Automated Border Contorl	1110 Markus Nuppeney, BSI, Automated Border Control based on ICAO compliant eMRTDs		Terry Hartmann, Unisys / Cathy Tilton, Daon; Raj Mashruwala / Steve Elliott, Purdue Univ.; Jonas Anderson, A&A Marine Vision AB		1120 Christoph Busch, Hochschule Darmstadt, Conformance to Standardized Minutia Detection Requirements
Face + Automated Border Contorl	1135 Stéphane Gentric, Morpho, Border control: From Technical to Operational Evaluation			Standards	1145 Fernando Podio, NIST, Performance Without Conformance? Value of Level 1, 2, 3, conformance.
Face + Automated Border Contorl	1200 Mark Burge, Mitre, Impact of Demographics on Face Recognition	Biometric Security	1205 Axel Munde, BSI, Biometrics and Security Evaluations	Standards	1200 The ISO/IEC 19795 Biometric Performance Testing and Reporting standard - See panel below
	1225 Lunch		1230 Lunch		1225 Lunch
Face + Automated Border Contorl	1350 Biometric WG, the IC Passport Committee of Japan, Study Report on Facial Biometrics for Japanese ePassports	Biometric Security	1400 Tony Mansfield, NPL, Evaluating Attack Resistance Levels of Biometric Systems		1335 Hiroyuki Suzuki, Tokyo Institute of technology A novel framework for evaluation of ID photo quality
Face + Automated Border Contorl	1415 Michael Thieme, IBG, Sanitized Online Collection and Identity Analysis Library (SOCIAL)	Biometric Security	1425 Xuebing Zhou, CASED, A Generalized Framework for Privacy/Security Assessment of Biometric Template Protection		1400 Giot Romain, ENSICAEN, Performance Evaluation of Biometric Template Update
Face + Automated Border Contorl	1445 Jonathon Phillips, NIST, The Next Face Challenge: Achieving Robust Human Level Performance	Biometric Security	1450 Christopher Rosenberger, ENSICAEN, How to Evaluate Transformation-Based Cancelable Biometric Systems?		1425 Stephen Elliott, Purdue University, Evolution of the Human Biometric Sensor Interaction
Face + Automated Border Contorl	1510 Brad Ulery, Noblis, Accuracy and Reliability of Forensic Latent Fingerprint Decisions	Biometric Security	1515 Elaine Newton, NIST, Editor ISO/IEC 30107, Anti-Spoofing and Liveness Detection Techniques	One-to-many identification	1450 Stephen Wood, NIST, Operational Ground-Truth: Determination, Limits and Analytic Implications
	1555 Break		1525 Break		1515 Break
Iris + Multimodal	1620 Jim Jasinski, Cogent, Multimodal Testing and Multimodal Device Evaluation	Biometric Security	1555 Stephanie Schuckers, Clarkson University, Biometric Liveness Detection: Framework and Metrics	One-to-many identification	1545 Michael Schuckers, St. Lawrence University, Scaling of Biometric False Match Rates Using Extreme Value Theory
Iris + Multimodal	1645 James Cambier, Cross Match Technologies, Certification of Iris Capture Devices	Biometric Security	1620 Ted Dunstone, Biometrics Institute, Biometric Vulnerability Assessments, An Update	One-to-many identification	1610 Brian DeCann and Arun Ross, WVU, Modeling an Anonymous Identification System
Iris + Multimodal	1710 Dan Potter, Scitor, Towards an Iris Device Qualification Test	Biometric Security	1645 Belen Fernandez, University Carlos III, Common Criteria and Biometric Performance Testing	One-to-many identification	1635 Eric Granger, University of Quebec, Dmitry Gorodnichy, CBSA, Evaluation of Face Recognition for Video Surveillance
Iris + Multimodal	1735 Adam Czajka, NASK PL, Iris Recognition Reliability: Authenticity Assessment + Influence of Illuminant Wavelength	Biometric Security	1710 Patrick Schuch, Dermalog, On Testing of Liveness Detection Feature Extractors for Fingerprint Live Scanners	One-to-many identification	1700 Patrick Grother, NIST, Evaluation of 1:N Recognition Algorithms: IREX III and MBE 2010 Methods + Analysis
	1800 Adjourn to reception		1735 Adjourn		1725 Adjourn until 2014… **See satellite sessions next page**

The ISO/IEC 19795 multipart standard – Biometric Performance Testing and Reporting	1203 Part 2: Michael Thieme, Technology + scenario testing	1209 Part 4: Patrick Grother, Interoperability tests	1215 Part 6: Tony Mansfield, Operational testing	1220 Other SC37 WG5 standards Raul Sanchez-Reillo, ISO/IEC 29156, 29197, 29198, and Patrick Grother ISO/IEC 29120
1200 Part 1: Tony Mansfield, Principles and framework	1206 Part 3: Eric Kukula, Modality specific aspects	1212 Part 5: Rick Lazarick, Graded PACS tests	1218 Part 7: Patrick Grother, On-card Comparison	

Satellite Session 1	Satellite Session II	Satellite Session III
Location: *Portrait Room, NIST* ***Time***: *13:00 - 18:00, Monday March 5*	***Location***: *Portrait Room, NIST* ***Time***: *09:00 - 12:00, Friday March 9, 2012*	***Location:*** *Heritage Room, NIST* ***Time:*** *09:00 – 16:30, Friday March 9*
Satellite Workshop: *NIST Fingerprint Image Quality – 2nd Generation*	***Satellite Workshop***: *Artefact, Liveness, Suspicious Presentation Detection*	***Satellite Workshop:*** *Voice Biometrics Data Interchange Standardization for Law Enforcement, Military & Homeland Security*
http://www.nist.gov/itl/iad/ig/development_nfiq_2.cfm	http://www.iso.org/iso/iso_catalogue/catalogue_detail.htm?csnumber=53227	http://www.nist.gov/itl/iad/ig/ansi_standard.cfm
Admission: *There is no fee to attend these workshops. All workshops attendees should email the respective chair at least one week in advance, so that he or she can arrange access to the NIST campus. Registration Deadline: March 1, but non U. S. Citizens or Permanent Residents must register on or before February 26.*		
Overview: *This workshop, which follows the IBPC 2010 session on NFIQ strategy, will present current technical work toward a revised algorithm. Goals are to inform users and to identify future direction.*	***Overview***: *This workshop is one of the first open sessions to address issues concerning biometric vulnerability. The focus will be on the concepts, terms, standards, and evaluation aspects.*	***Overview:*** *The focus of the workshop is transmission of voice data and associated metadata for forensic analysis. This workshop will not deal with voice biometrics for applications such as access control or with features or models extracted from voice data.*
Chair: *Elham DOT Tabassi AT nist DOT gov*	***Chair***: *Elaine DOT Newton AT nist DOT gov*	***Chairs:*** *Brad DOT Wing AT nist DOT gov* *Mark DOT Przybocki AT nist DOT gov* *Hirotaka DOT Nakasone AT ic DOT fbi DOT gov*
Moderator: *Elham Tabassi, NFIQ Architect*	***Moderator:*** *Elaine Newton, NIST, Editor ISO/IEC 30107*	***Moderator:*** *Brad Wing, ANSI/NIST ITL Editor*
Speakers: *1300 Elham Tabassi, NIST, NFIQ 2.0 project overview* *1320 Oliver Bausinger, BSI, Motivation and use cases for NFIQ 2.0* *1335 Michael Schwaiger, Secunet, Framework, architecture, modularization* *1355 Christoph Busch, Fraunhofer IGD, Technical overview of features* *1405 Martin Olsen, CASED, Candidate features, computation and visualization* *1515 Intermezzo* *1545 Johannes Merkle, Secunet, Quality feature evaluation, preliminary results* *1615 Timo Ruhland, BKA, AFIS quality requirements and implementations* *1630 Soweon Yoon and Anil Jain, MSU, Inclusion of mutilated fingerprint detection in NFIQ 2.0?* *1650 Elham Tabassi, NIST, NFIQ 2.0 developments for the next year* *1715 Discussion round on way forward*	***Speakers***: 1. *Elaine Newton, NIST, Editor of ISO/IEC 30107: Overview of the Current Draft International Standard 30107 on Artefact and Liveness Detection* 2. *Rick Lazarick, CSC, Co-editor of ISO/IEC 30107: Spoofs, Subversion & Suspicion: Terms and Concepts* 3. *Stephanie Schuckers, Clarkson University, and Arun Ross, West Virginia University, Error rate metrics proposed for detection of suspicious presentations to biometric authentication systems.* 4. *Ralph Breithaupt, BSI, Need and perspectives to realize liveness detection* 5. *Axel Munde, BSI, How can artifact detection complement common criteria and other security assessments of authentication systems*	***Details***: *The ANSI/NIST-ITL standard "Data Format for the Interchange of Fingerprint, Facial & Other Biometric Information" has formed a committee to develop a new record type for voice data. There also has been as series of workshops on Investigatory Voice Biometrics over the past 2 years, hosted a joint US-Government Committee.* *After an initial presentations by NIST to describe the processes involved in modifying the ANSI/NIST-ITL standard, the format of the workshop will be guided, open discussion of the requirements for useful transmission of voice data for forensic analysis. The US Government committee will present a 'strawman' record that will be used by the ANSI/NIST-ITL Committee as a starting point -- beginning with this workshop. Topics covered: actual transmission of the audio samples as well as associated metadata: analog and digital recording characteristics (including types of equipment); speaker and content characteristics (language, type of vocalization, situation - such as a 911 call); redaction and snipping; environmental factors; geographic location; segmentation; diarization; quality; codecs and much more.* *This workshop will be followed by meetings of the ANSI/NIST-ITL Voice Committee to refine the record content prior to submission for voting upon for inclusion in the NIST-ITL standard.*