



**INTERNATIONAL BIOMETRIC PERFORMANCE CONFERENCE**  
 Evaluation and Performance of Biometric Technologies



April 1-3, 2014  
 Call for Papers



NIST, NPL and Fraunhofer IGD invite talks for the IBPC 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 is focused on quantitative, applied biometrics, aiming to elicit information that guides policy, design, planning, and implementation of high performance biometric systems, particularly how systems are tested, certified, upgraded and improved. The goal is not to give specific testing results unless the test methods are novel or the results are fundamental to future decisions. The conference specifically invites talks on automated border control (ABC), video-based recognition, security, and emerging biometric uses. The conference aims to advance and expand the use of biometrics by targeting operationally relevant themes, giving emphasis to design, procurement, and what performance data operators require from test and evaluation activities.

**Topic area I: Test methods:**

- Identification systems: metrics, limits, scalability, relation to 1:1
- Recognition in video: archival and streaming, multiple persons, cameras
- Product vs. component tests, certification, interoperability
- Use of biometrics in early life: Effects of age and ageing
- Beyond the DET: Novel tests and performance metrics
- Efficient testing, re-usable testing, frameworks
- Statistical methods for efficiency, for prediction
- Desirable, undesirable algorithm properties – 1:1, 1:N and forensics
- Desirable, undesirable sample properties, and quality estimation
- Performance of sensors and capture devices
- Untested, unspoken aspects of performance: what matters, what does not, what's in the noise?
- Testing and standardization gaps; testing in academia
- Usability and accessibility testing for biometrics

**Topic area II: Operational aspects**

- Certification: When is it viable, needed and cost effective
- How to drive error rates lower: Measurement for control + mitigation
- Quality of samples and databases. Evaluation / roles of Quality
- Designing tests as integral parts of operational systems; cloud tests
- Total system performance and tradeoffs: Accuracy, speed, security, reliability, usability, interoperability, scalability, assurance, stability
- How to specify performance in a procurement document
- Technology vs. scenario vs. operational vs. other tests
- Realizing multimodal benefits: fusion beyond simple OR
- Data and its ground-truth: operational vs. laboratory vs. synthetic

**Topics area III: Security and privacy aspects**

- Security: risks, priors, costs, fallbacks, evaluation of multifactor auth.
- Resilience under active attacks (vulnerability, spoofing)
- Defeat of systems (detection of evasion)
- Feasibility of common criteria testing of biometric components
- Privacy enhancing technology, de-identification
- Remote authentication: Challenges, assurance, testing
- Template protection and biometric pseudo-identifiers
- Retrospectives, lessons learned, long term perspective, critical appraisal of other programs, events, specifications.

**Program Committee:**

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

**Intended 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.

**Important dates:**

<b>Jan 11 2014</b>	<b>Submission of 1-5 page abstract</b>
<b>Feb 01 2014</b>	Notification of acceptance
<b>Mar 23, 2014</b>	Submission of slides + papers
<b>Mar 23, 2014</b>	Online registration closes
<b>Mar 31 2014</b>	<b>Satellite Workshops I:</b> a. Vulnerability assessment b. TBA
<b>Apr 01 2014</b> <b>Apr 03 2014</b>	<b>IBPC 2014 Conference</b>
<b>Apr 04 2014</b>	<b>Satellite Workshops II: TBA</b>

**Logistics:**

- When: April 1-3, 2014
- Where: Green Auditorium (cap. 250)  
NIST Gaithersburg, MD, USA
- Internet: Wireless
- Hotel: Gaithersburg area hotels, TBA
- Fee: \$US 175 (estimate) via registration

**Contact the organizers:**

Email: [ibpc2014 AT nist DOT gov](mailto:ibpc2014@nist.gov)

