Second NIST Quality Workshop

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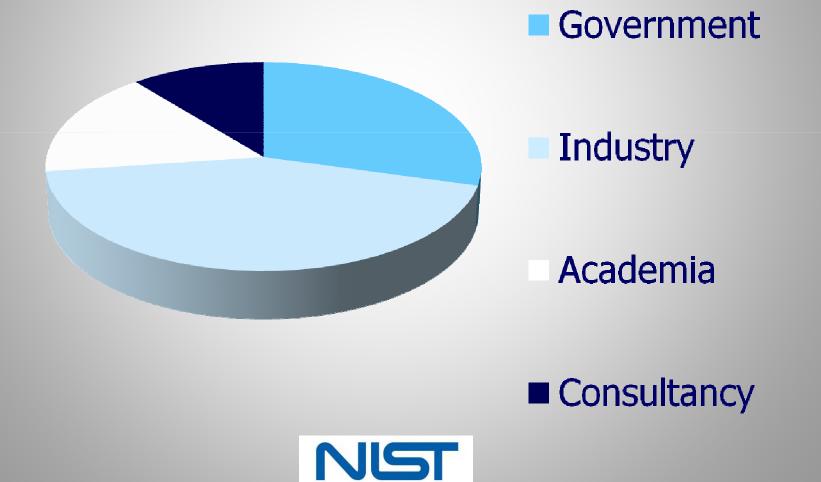November 7-8, 2007

NIST is grateful to …

§ **The sponsors**
  - § DHS / US VISIT
  - § DHS / S+T
  - § DOJ / FBI
  - § DOD

§ **For**
  - § Pushing in this area
  - § Continued support
    - § esp. these workshops

§ **The speakers**
  - § 43 speakers
  - § 41 talks
  - § ~150 attendees?

§ **The audience, for yet-to-be delivered**
  - § Questions
  - § Discussion
  - § Suggestions
  - § Entropy!

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Participation I

- Government
- Industry
- Academia
- Consultancy

Participation II

§ International audience

  § UK, JP, KR, DE, FR, IT, SU, CZ, CA, US

§ Modalities

  § Finger, Face, Iris, DNA (+ Latent Finger)
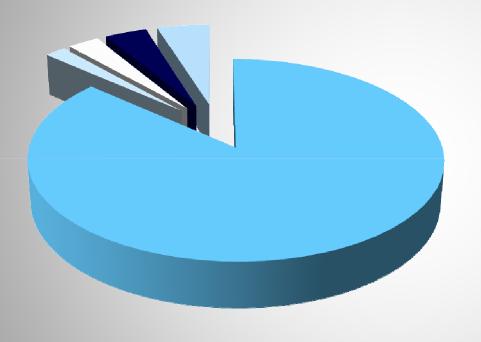
§ Government

  § 10 agencies present

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Logistics

- § Attendee lists
  - § Incomplete in the packet
  - § Complete, emailed to you post-workshop
- § Lunch is served both days
  - § But no reception this evening - Alternative is the set of ZAGATs quality experts in the folder.
  - § Coffee in the room this time ☺
  - § And internet access too ☺
- § Speakers, modifying your slides is OK
  - § Please see Elham or Patrick before session
- § Mobile phones

Toward Perfect Biometric Accuracy

The last 10^{-x} percent

- Mostly by design
- Errors from the user
- Errors due to environment
- Errors in imaging
- Errors due to bad character

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Uses of Quantitative Quality Assessment

§ Conditional reacquisition
  - § Acceptance for enrollment
    - § For credential issuance (visa, passport, CAC, PIV)
  - § Acceptance for verification
    - § Of the samples just captured which one to send for matching?
    - § Or acquire still more?
  - § Acceptance for identification
    - § Is the subject offering a poor sample deliberately?

§ Initiate invocation of special processing or matching algorithms

§ Quality Monitoring (MIS)
  - § Are some biometric field locations giving low quality?
  - § Only in the evening?

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Thank You

Feedback is welcome

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Future NIST Quality Programs

§ Problem: Quality score interoperability
§ Solution: Quality calibration
  § Multiple databases
  § Multiple matchers

§ Problem: Quality analysis is difficult
§ Solution: Quality evaluation
  § Offline evaluation
  § Massive databases

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This is a workshop!

§ Work, what work? We want speakers, participants to

1. Identify action items
   - § For NIST
   - § For the Standards Development Organizations
   - § For industry
   - § For academia

2. Identify trends
   - § In industry
   - § In government
   - § In the marketplace

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