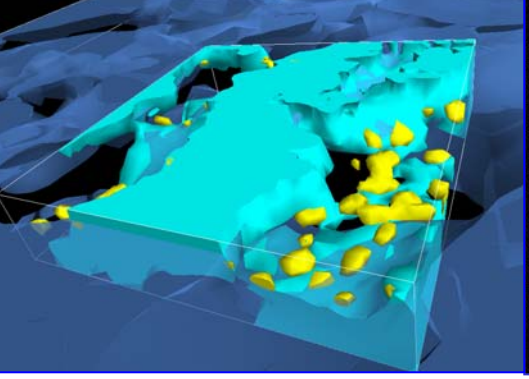
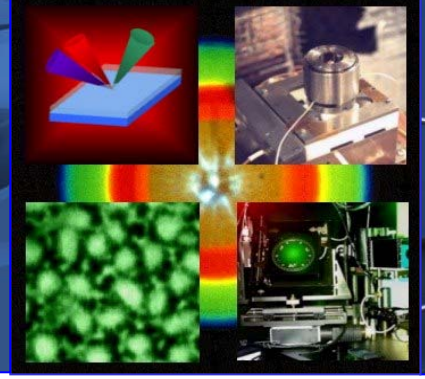
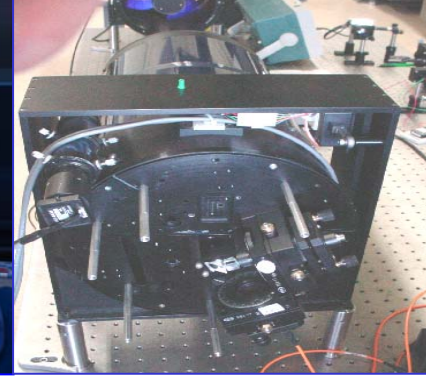





WELCOME

NIST/Information Technology Laboratory (ITL)

ANSI/NIST FINGERPRINT STANDARDS WORKSHOP

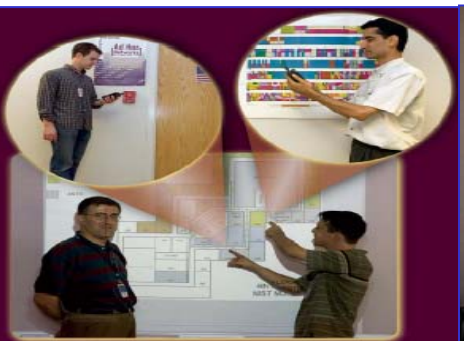
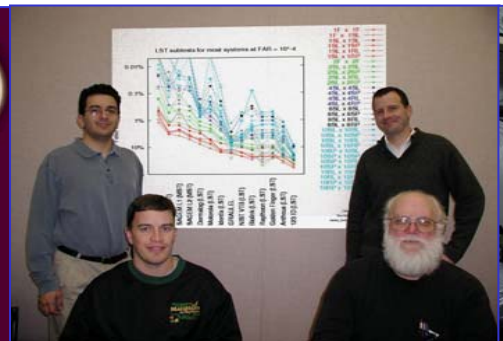
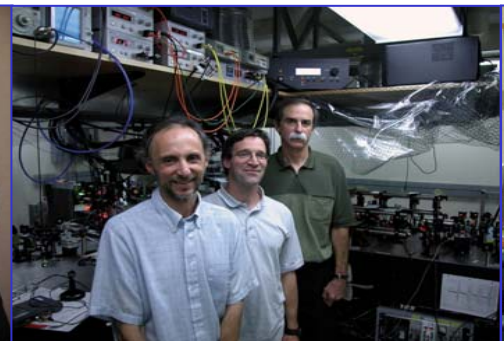
Dr. Shashi Phoha

Director, Information Technology Laboratory

sphoha@nist.gov

301-975-2900

26-28 April 2005


NIST enables the future...

by strengthening the innovation infrastructure through measurement, standards, and technology to:

- **facilitate trade**
- **enhance public safety & security**
- **improve quality of life**

...and create jobs

...through effective partnerships with industry, academia, and other government agencies.

ITL MISSION

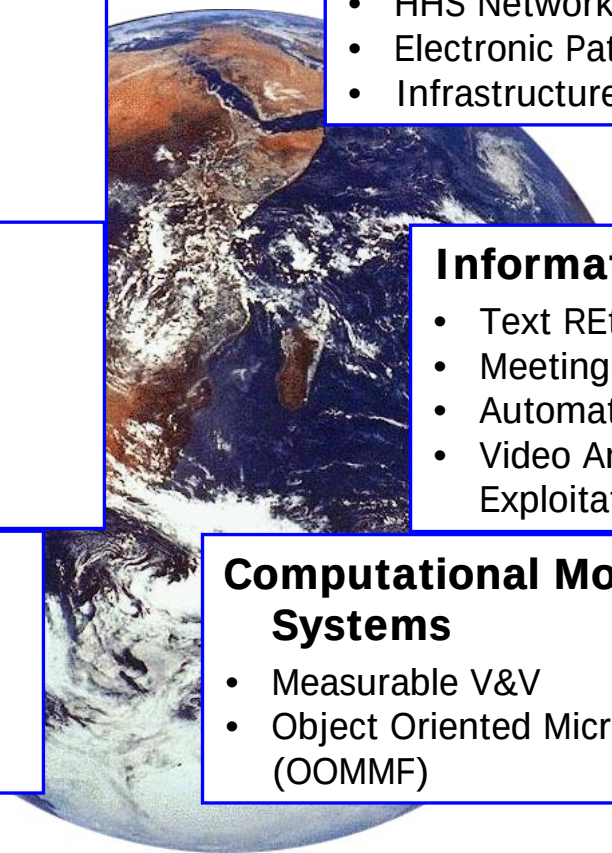
Support U.S. industry, government, and academia through measures and standards that
- **enable new computational methods of scientific inquiry,**
- **assure IT innovations for maintaining global leadership,**
- **insertion advanced information technology in complex societal processes.**

Information Interoperability Standards

- Software: XML
- Wireless: 802.11/Bluetooth
- Communications: Border Gateway Protocol

Healthcare IT

- HHS Network Architecture
- Electronic Patient Records
- Infrastructure interoperability



Critical Infrastructure Security

- Internet Security
- Computer Security Resource Center
- Cryptographic Module Validation Program
- Building Security
- Indoor Localization: First Responders

Information Access

- Text REtrieval Conference (TREC)
- Meeting Room Project
- Automatic Content Extraction
- Video Analysis and Content Exploitation (VACE)

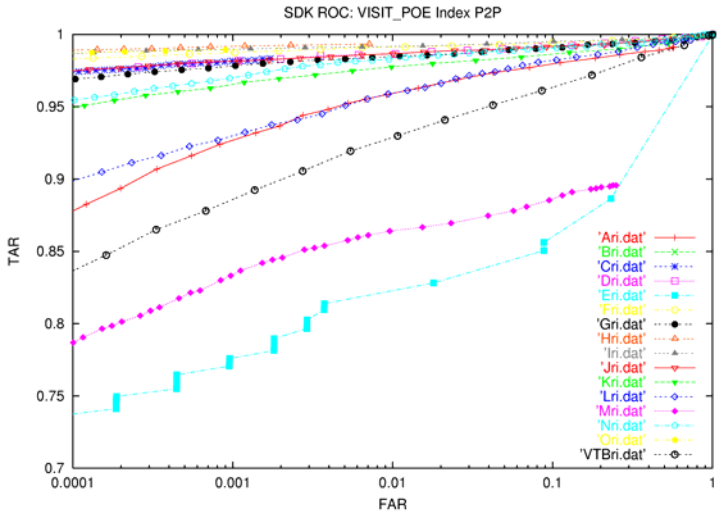
Computer Forensics

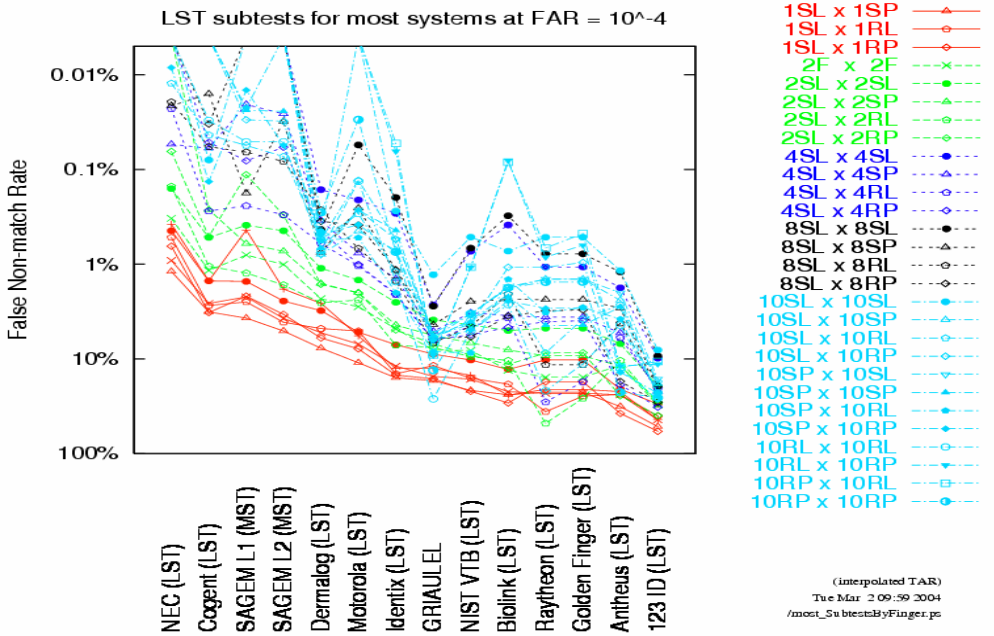
- Computer Forensics Tool Testing (CFTT)
- National Software Reference Library (NSRL)

Computational Modeling of Physical Systems

- Measurable V&V
- Object Oriented Micro Magnetic Framework (OOMMF)

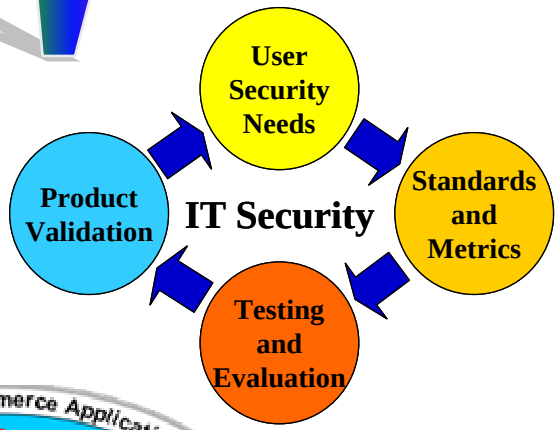
US VISIT: Biometrics





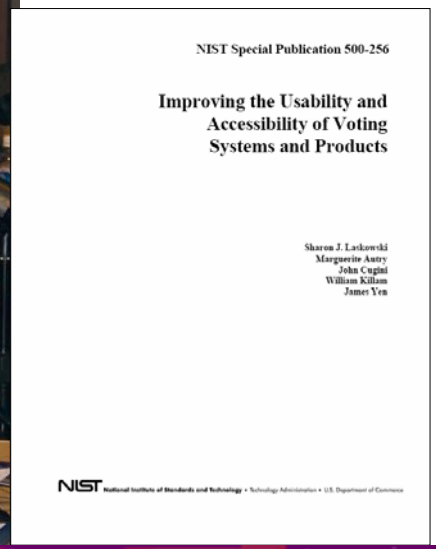
- Fingerprint Vendor Technology Evaluation (FpVTE) Report delivered to DOJ
- NISTIR on performance for US VISIT IDENT System
- NISTIR on Studies of Plain-to-Rolled Fingerprint Matching
- INCITS M1 standard on finger image-based data interchange formats
- Tested vendor fingerprint Software Development Kits (SDKs)
- Established new laboratory for multimodal biometrics accuracy research and data collection

PIV: Computer Security



- FIPS 201, Personal Identity Verification (PIV) of Federal Employees and Contractors, developed in response to Homeland Security Presidential Directive #12 (HSPD-12)
- Key management best practices for organizations
- Issued 500th crypto module validation certificate; Validated 325 crypto algorithm implementations in the year
- Technical Guidance (Voice Over IP, BGP security, Access Control, Check List Program, Windows XP Checklist, PDA Forensics, Vulnerability Naming Scheme, Wireless Network Security)

Government, Economy, and Biometrics

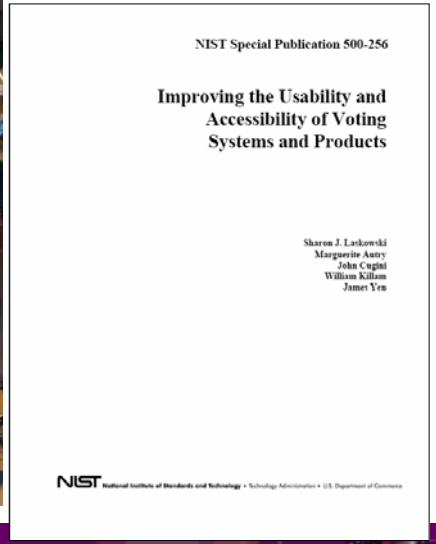


NIST & HAVA

Building Trust and Confidence in Voting Systems

- Critical Technology for Law Enforcement-AFIS
- Critical to Homeland Security-US Visit
- PIV
- Open Standards for industry
- Supports NIST Mission
  - facilitate trade
  - enhance public safety & security
  - improve quality of life

Electronic Voting System Standards



NIST & HAVA
Building Trust and Confidence in Voting Systems

- First Symposium on Building Trust and Confidence in Voting Systems
- Report to Congress (via EAC): "Improving the Usability and Accessibility of Voting Systems and Products"
- Assisted in organization of the Technical Guidelines Development Committee and 29 Subcommittee Meetings
  - Core Requirements and Testing Subcommittee
  - Human Factor & Privacy Subcommittee
  - Security and Transparency Subcommittee
- Goals:
  - Initial set of recommendations (due April 2005)
  - Updated standards (due Jan 2006)

WORKSHOP GOALS

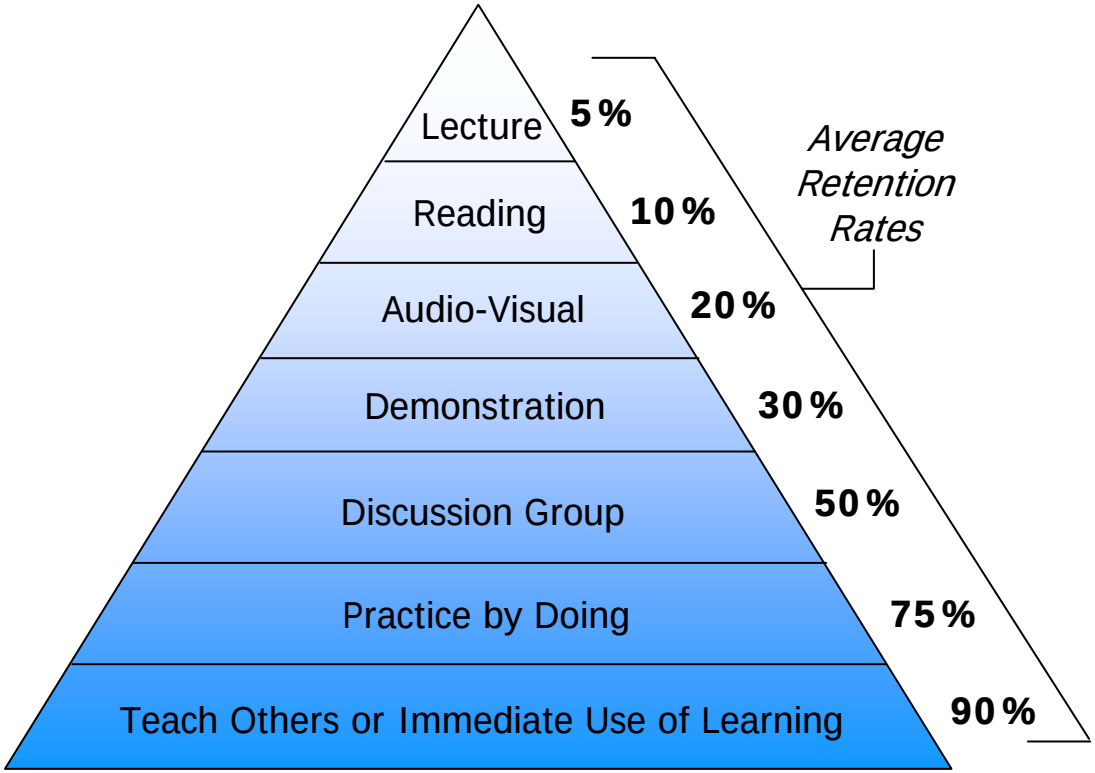
- Review and Upgrade ANSI/NIST-ITL 1-2000, *Data Format for the Interchange of Fingerprint, Facial and SMT Information*
- Technology Upgrades

  -XML

  -FASTER FINGER PRINT CAPTURE METHODS

  -ENCODING MINUTE DETAILS FROM FINGERPRINT IMAGES
- HARMONIZING WITH OTHER STANDARDS

How We Learn?



The Learning Pyramid

National Training Laboratories, Bethel, Maine

- Making Connections
- Asking Questions
- Determining Importance
- Visualizing
- Inferring
- Synthesizing
- Repairing Comprehension: Fix-up Strategies

HAVE A SUCCESSFUL WORKSHOP