National Science & Technology Council

Subcommittee on Biometrics

Biometrics in the USG

Duane Blackburn
NSTC Agency Representative
Executive Office of the President

www.ostp.gov
www.biometricscatalog.org/NSTCSubcommittee/

Office of Science & Technology Policy

- Advise the President & EOP
  - Provide S&T analysis and judgment on major policies, plans, programs, & budgets
- Lead the interagency effort
  - Define (with OMB) R&D priorities to guide the agencies when developing their budgets
  - Work with agencies on high-level S&T policy issues
- Work with the private sector
  - Ensure Federal S&T investments contribute to economic prosperity, environmental quality, and national security.
    - Collaborate on international S&T issues

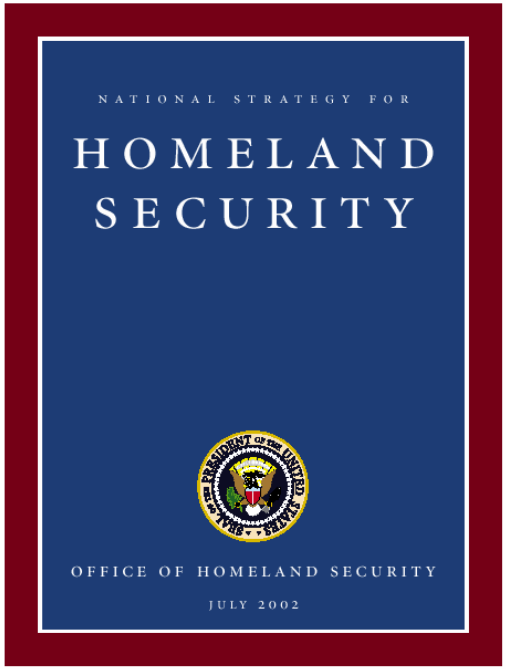
National Strategy for Homeland Security (July 2002)

Priority objectives

1. Prevent terrorist attacks within the U.S.
2. Reduce America's vulnerability to terrorism
3. Minimize damage and recover from attacks

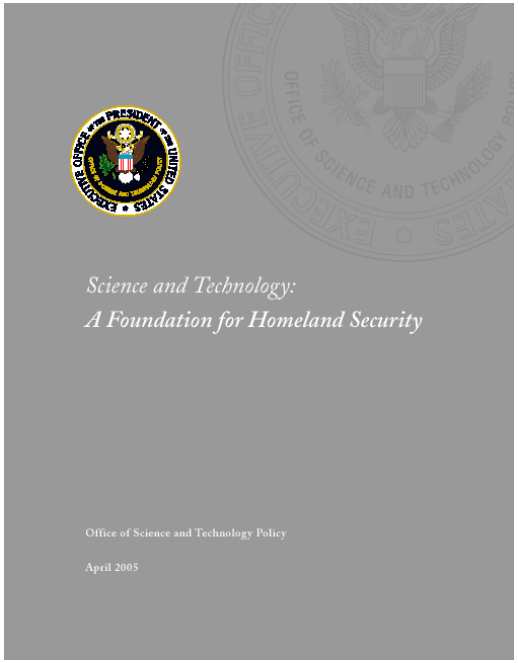
Science & Technology initiatives (11)

3. Apply biometric technology to identification devices



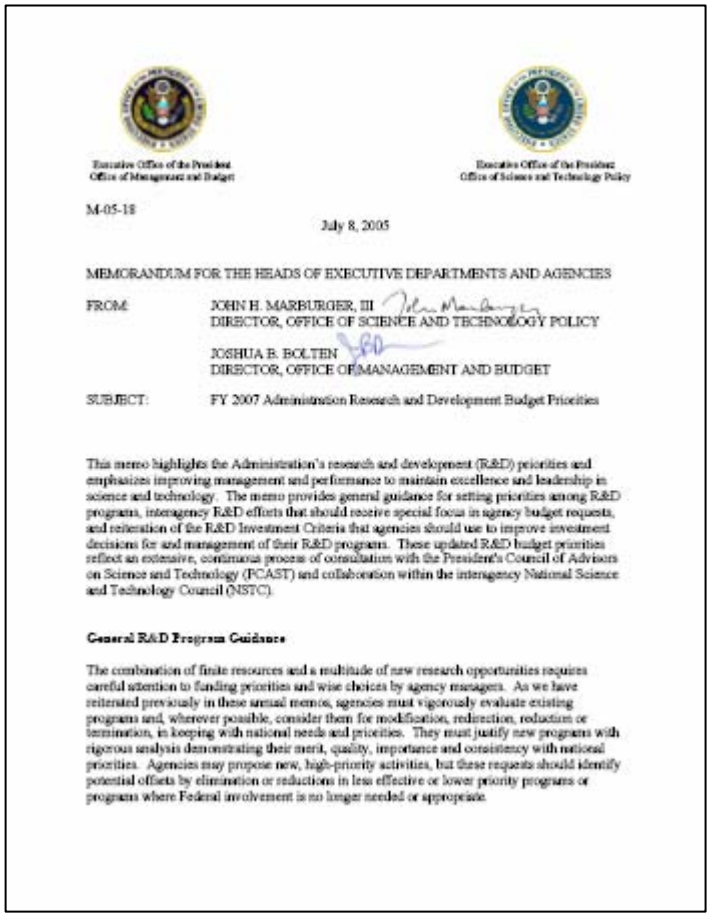
Science and Technology: A Foundation for Homeland Security (April 2005)

"Strategies for finding terrorists can be complicated by their efforts to disguise themselves among innocent civilians. As a counter to this, the implementation of biometric technologies … shows great promise in improving the accuracy, consistency, and efficiency of identification devices"



FY07 Administration R&D Priorities

agencies should place increased emphasis on R&D efforts that support…enhanced biometric systems…"



Executive Office of the President
Office of Management and Budget

Executive Office of the President
Office of Science and Technology Policy

M-05-18

July 8, 2005

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: JOHN H. MARBURGER, III
DIRECTOR, OFFICE OF SCIENCE AND TECHNOLOGY POLICY

JOSHUA B. BOLTEN
DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET

SUBJECT: FY 2007 Administration Research and Development Budget Priorities

This memo highlights the Administration's research and development (R&D) priorities and emphasizes improving management and performance to maintain excellence and leadership in science and technology. The memo provides general guidance for setting priorities among R&D programs, interagency R&D efforts that should receive special focus in agency budget requests, and reiteration of the R&D Investment Criteria that agencies should use to improve investment decisions for and management of their R&D programs. These updated R&D budget priorities reflect an extensive, continuous process of consultation with the President's Council of Advisors on Science and Technology (PCAST) and collaboration within the interagency National Science and Technology Council (NSTC).

General R&D Program Guidance

The combination of finite resources and a multitude of new research opportunities requires careful attention to funding priorities and wise choices by agency managers. As we have reiterated previously in these annual memos, agencies must vigorously evaluate existing programs and, wherever possible, consider them for modification, redirection, reduction or termination, in keeping with national needs and priorities. They must justify new programs with rigorous analysis demonstrating their merit, quality, importance and consistency with national priorities. Agencies may propose new, high-priority activities, but these requests should identify potential offsets by elimination or reductions in less effective or lower priority programs or programs where Federal involvement is no longer needed or appropriate.

USG Biometric Uses

- Identifying criminals and terrorists
- Background checks
- Border Security
- Facilitating travel and trade
- Promoting officer and school safety
- Protecting government assets
- Identity management

Sensor Takes an Observation

Mathematically Describe the Observation

Compare to Other Observations

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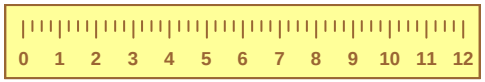

Standards

Determine Appropriate Modality

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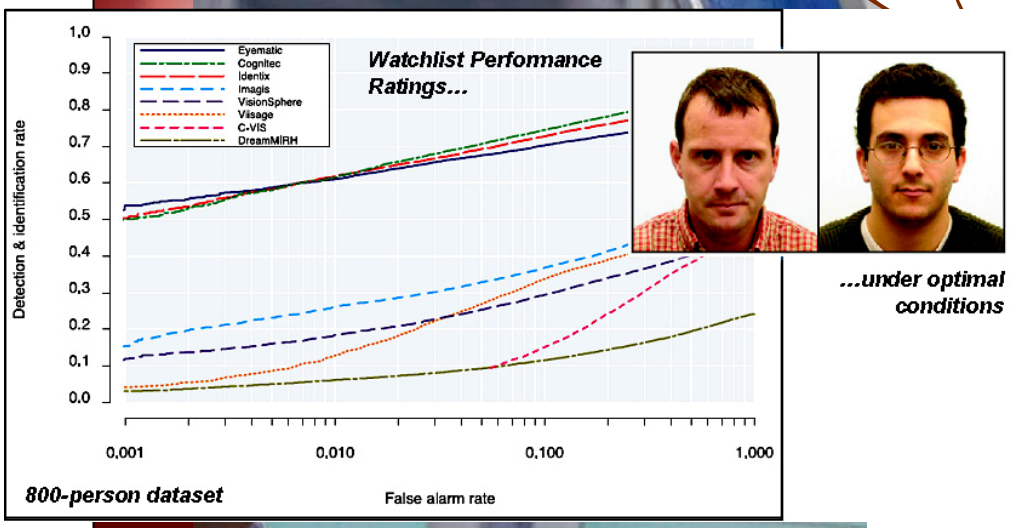

Research and Development

Future Biometric Capabilities

Technology, Operational & Scenario

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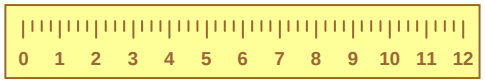

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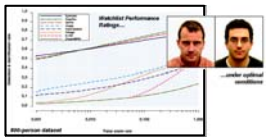

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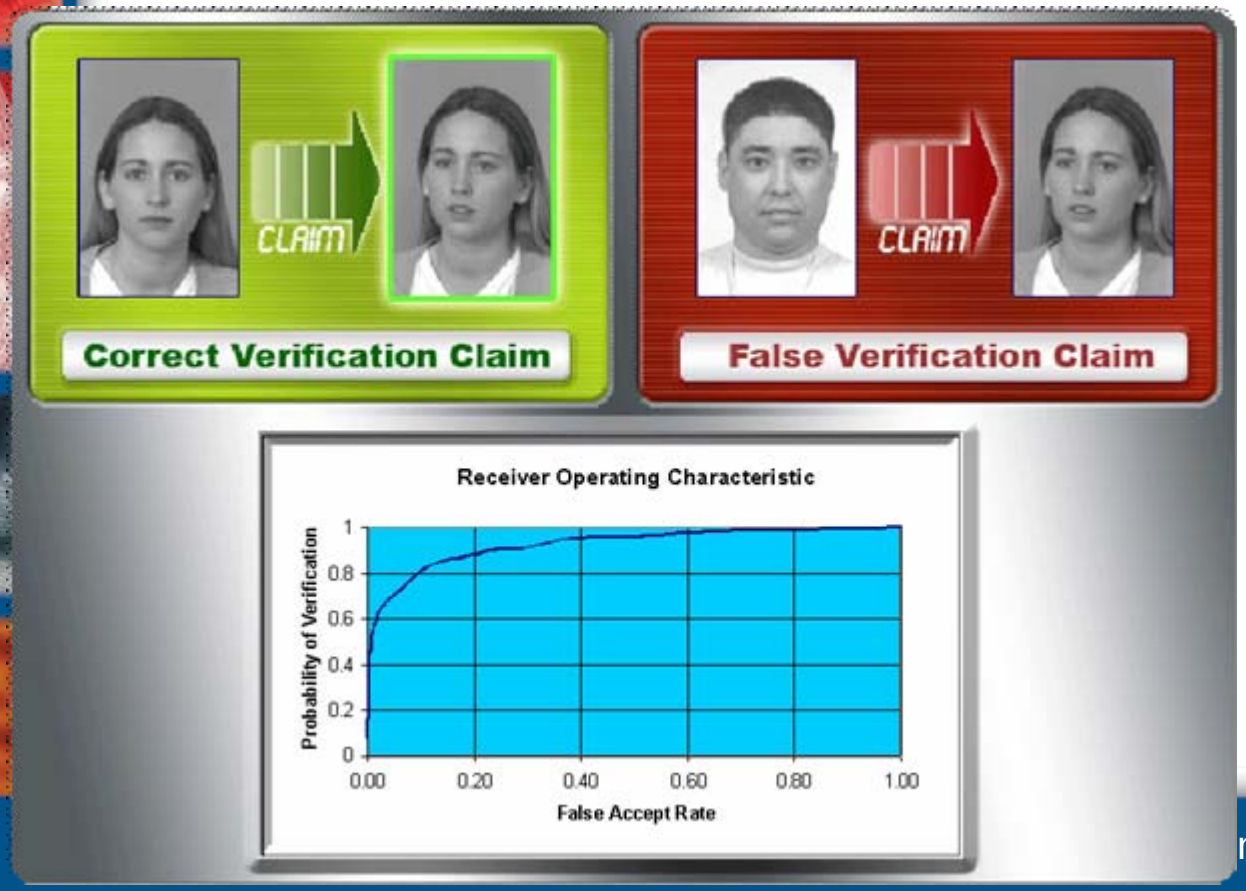

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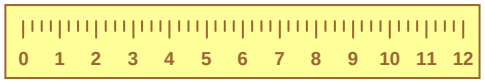

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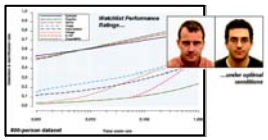

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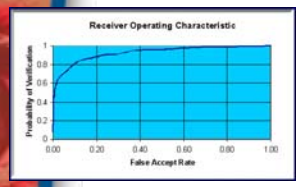

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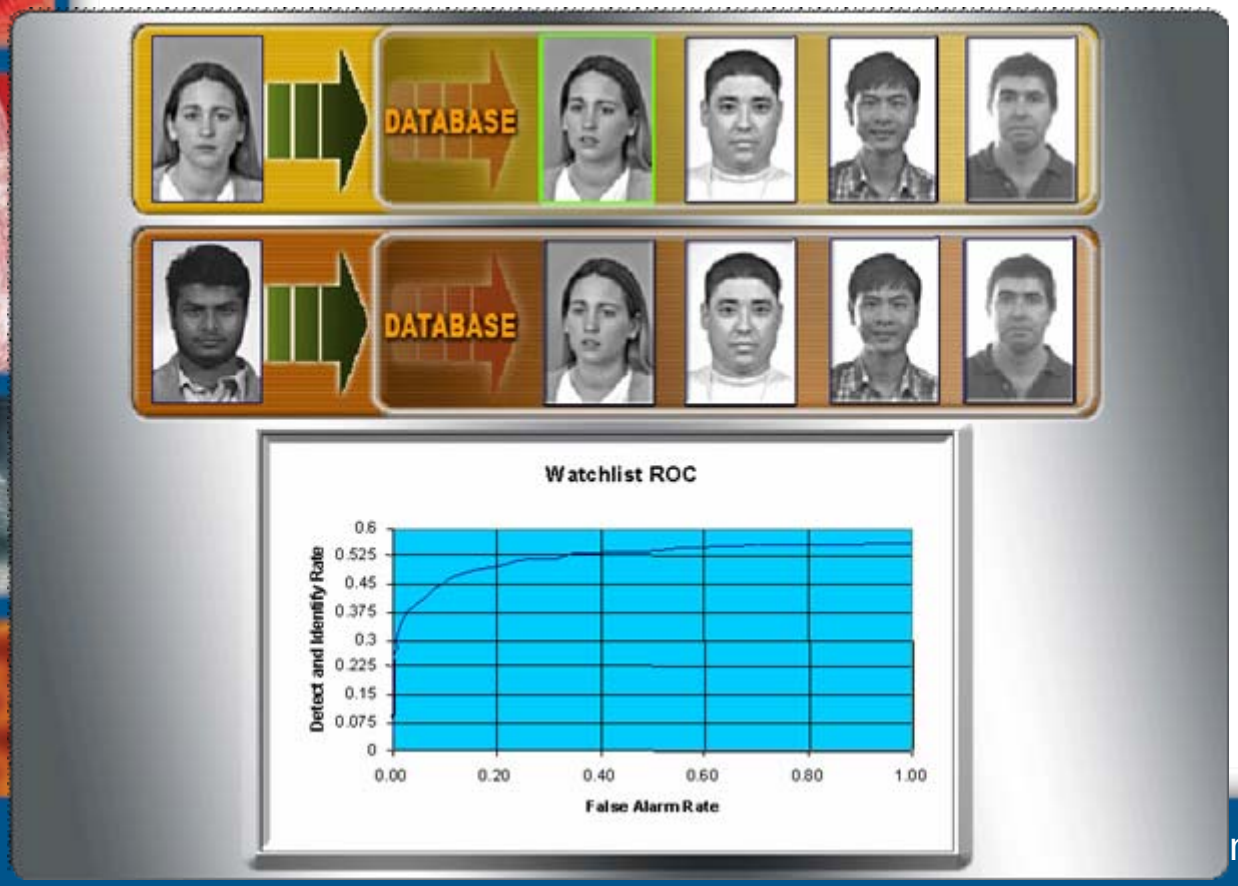

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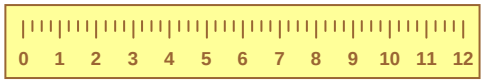

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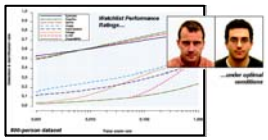

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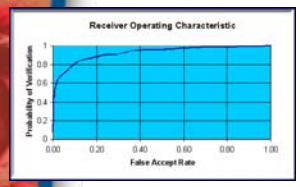

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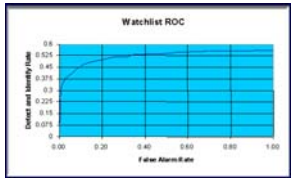

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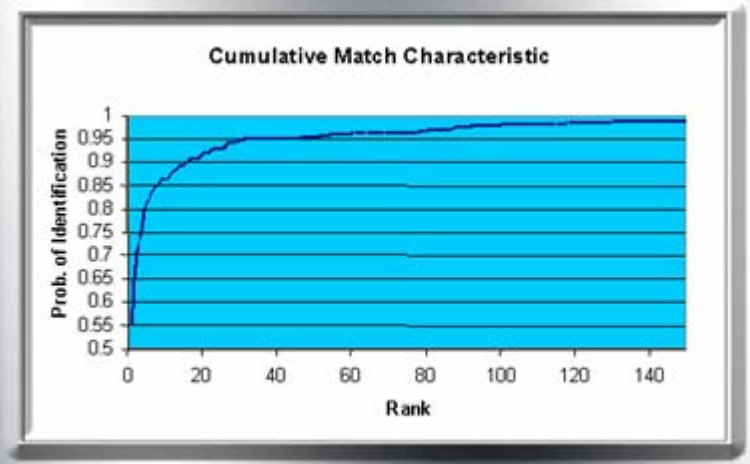

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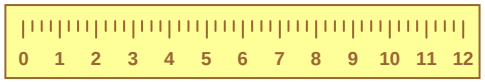

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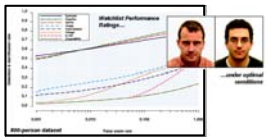

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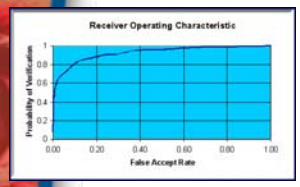

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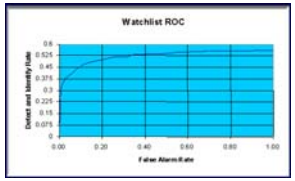

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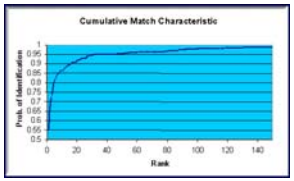

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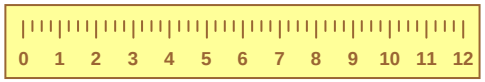

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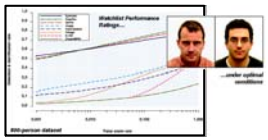

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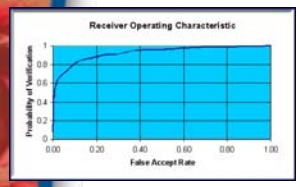

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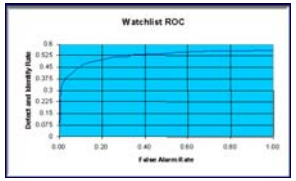

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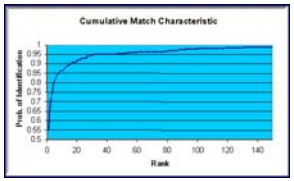

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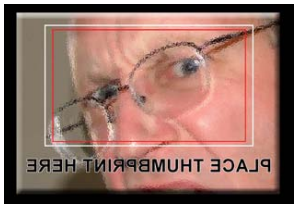

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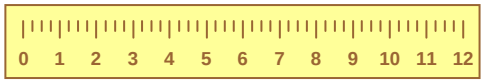

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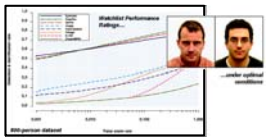

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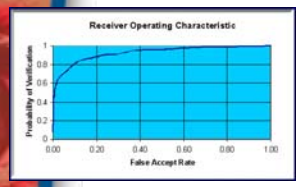

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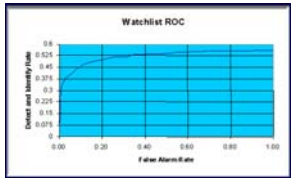

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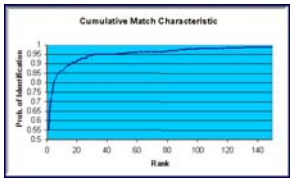

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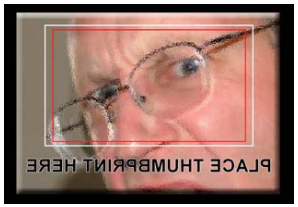

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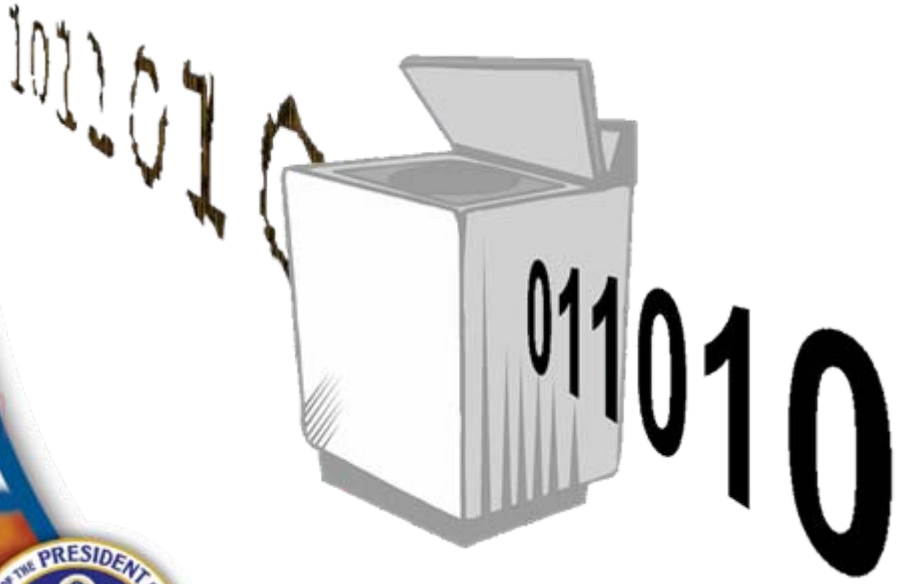

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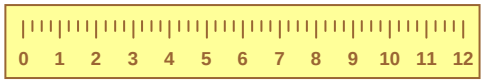

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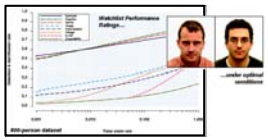

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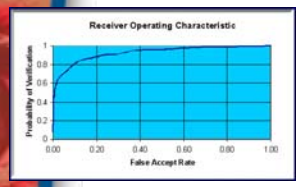

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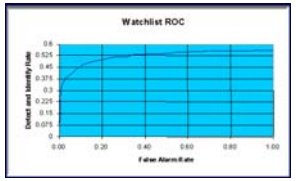

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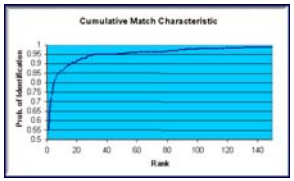

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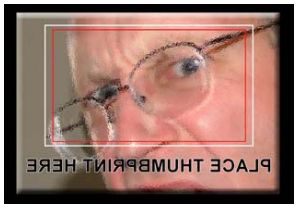

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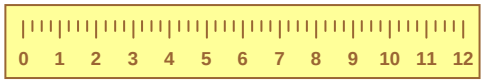

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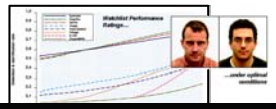

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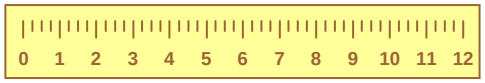

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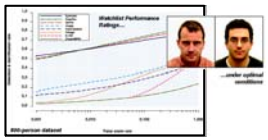

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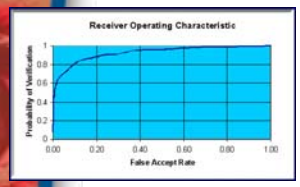

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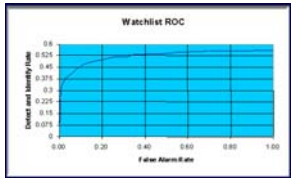

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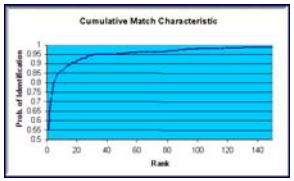

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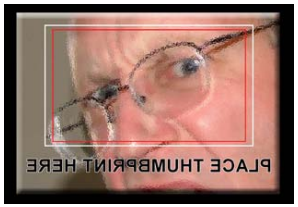

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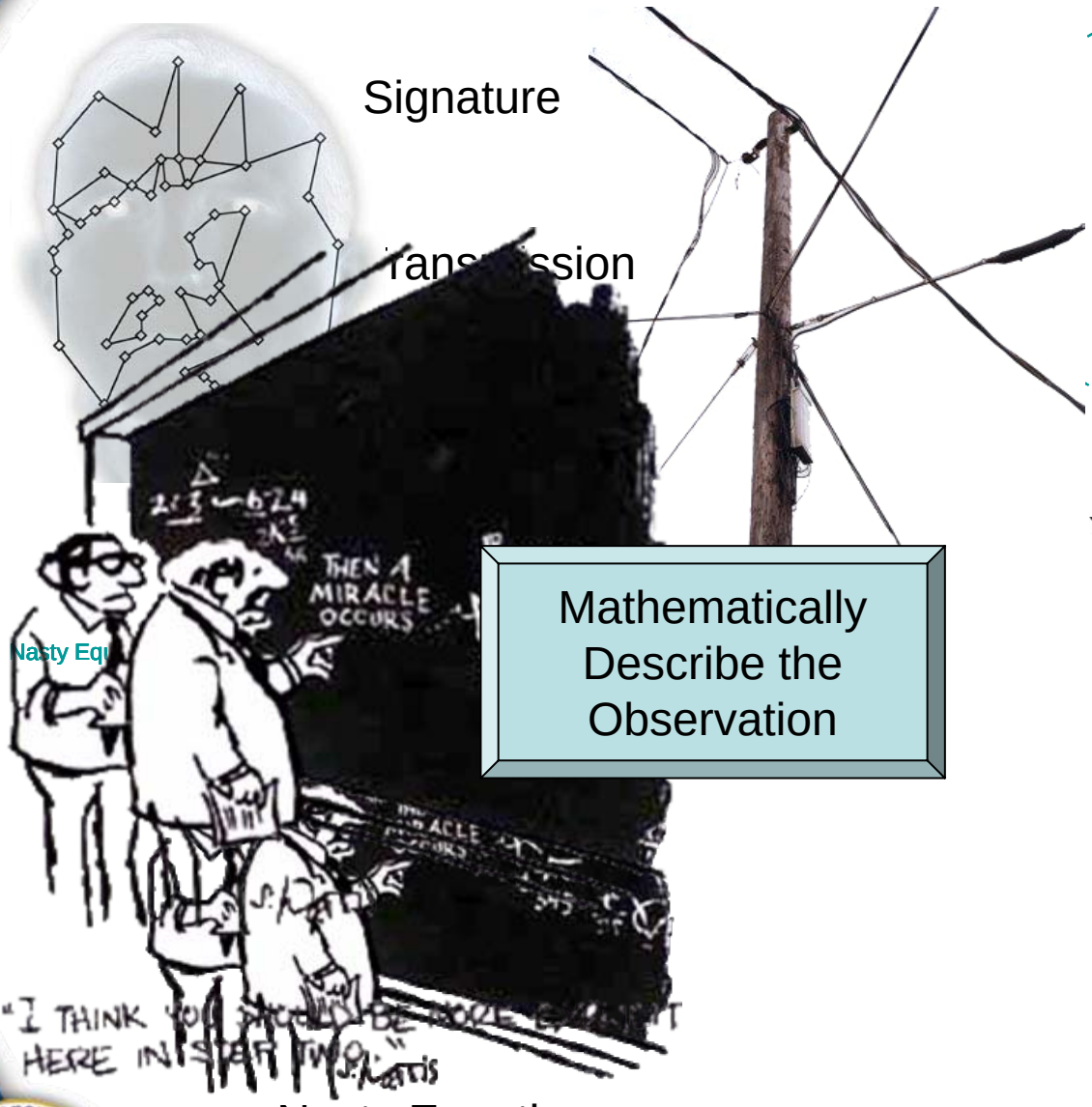
Encrypt

Transmission



Mathematically Describe the Observation

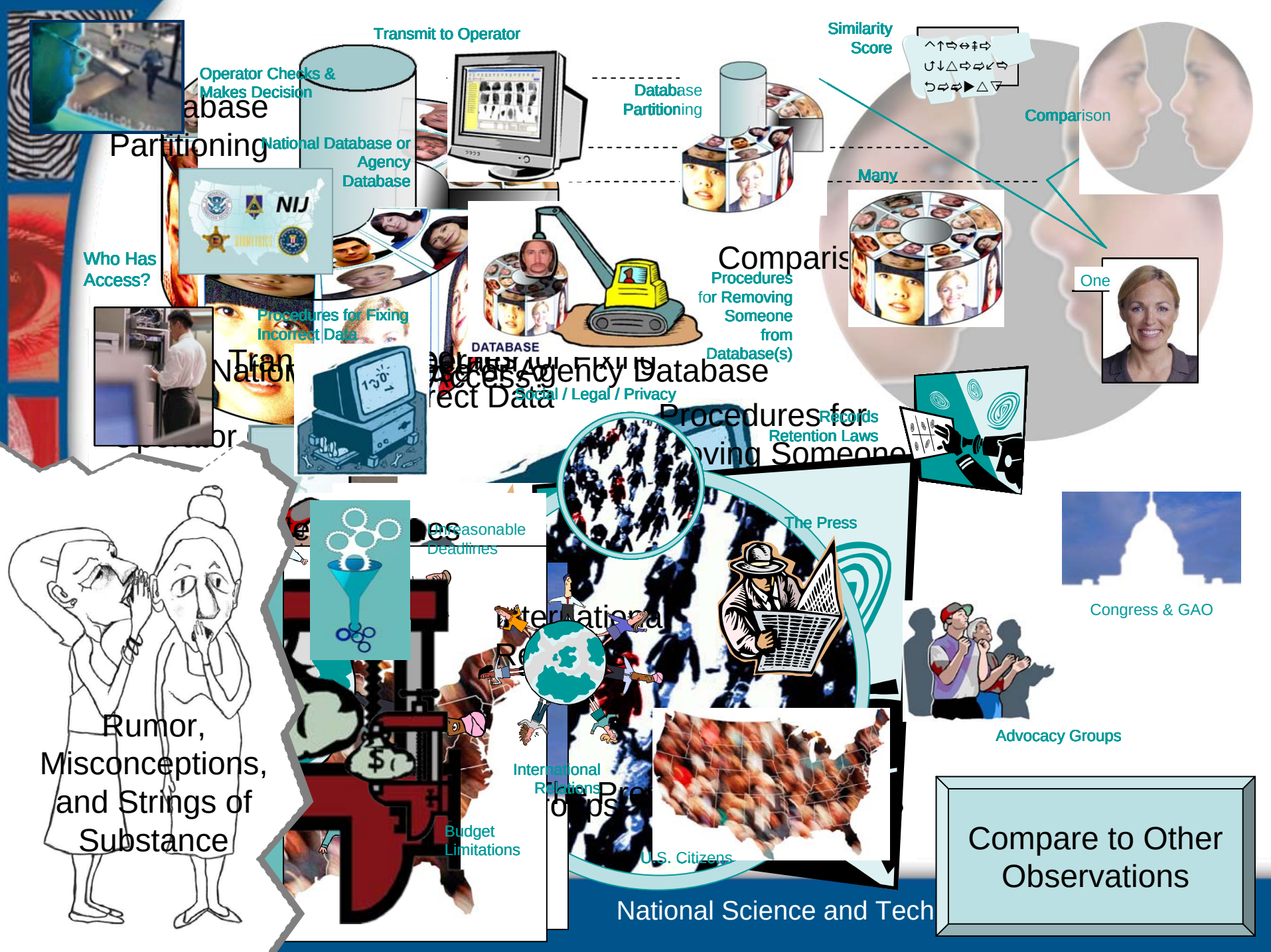
Nasty Equations

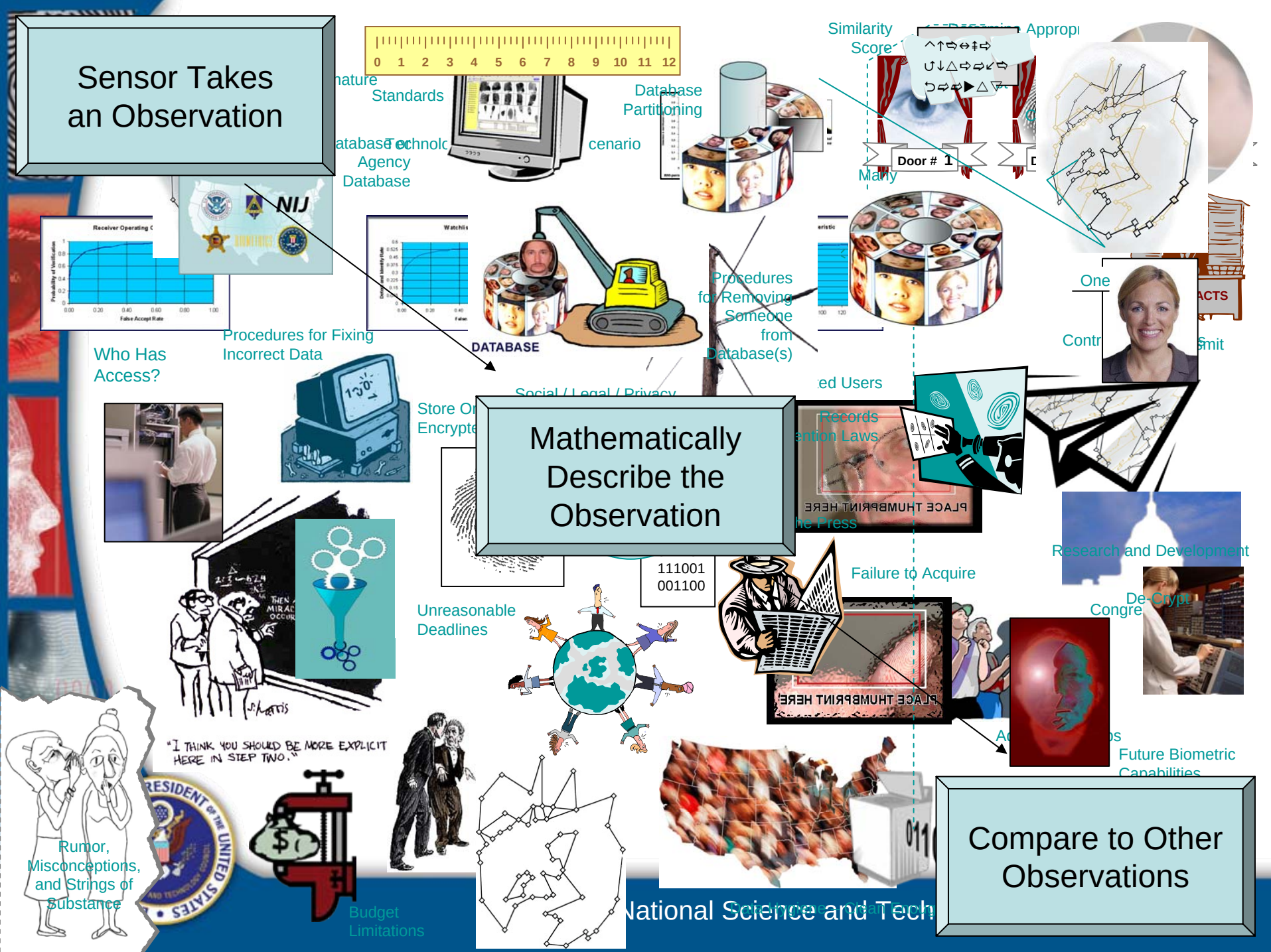
"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

Sensor Takes an Observation

Mathematically Describe the Observation

Compare to Other Observations


Transmit to Operator
Similarity Score
Operator Checks & Makes Decision
Database Partitioning
National Database or Agency Database
Database Partitioning
Comparison
Many
NIJ
Who Has Access?
Comparis
Procedures for Removing Someone from Database(s)
One
Procedures for Fixing Incorrect Data
DATABASE
Social / Legal / Privacy
Records Retention Laws
Unreasonable Deadlines
The Press
Congress & GAO
Rumor, Misconceptions, and Strings of Substance
International Relations
Budget Limitations
U.S. Citizens
Advocacy Groups
Compare to Other Observations
National Science and Tech


Sensor Takes an Observation
Mathematically Describe the Observation
Compare to Other Observations
Standards
Database Partitioning
Similarity Score
Door # 1
Many
Agency Database
NIJ
DATABASE
Procedures for Removing Someone from Database(s)
Procedures for Fixing Incorrect Data
Who Has Access?
Social / Legal / Privacy
Store On
Encrypte
Records
Research and Development
Failure to Acquire
Unreasonable Deadlines
111001
001100
"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."
Future Biometric Capabilities
Rumor, Misconceptions, and Strings of Substance
Budget Limitations
National Science and Tech