



Biometrics & Positive Identification

Teresa Wu

Board of Director, Secure Identity and Biometrics Association
Director of Strategic Marketing and Government Relations, MorphoTrak

What is Biometrics

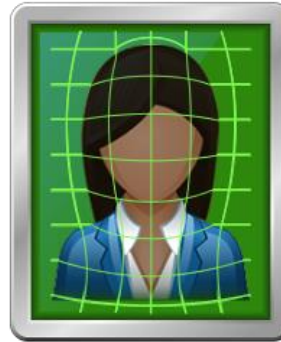
- ▶ Any human physiological and/or behavioral characteristic can be used as a biometric characteristic as long as it satisfies the following requirements (Jain, Ross & Prabhakar, 2004):
universality, distinctiveness, permanence/persistence, collectability
- ▶ It is about a set of biological features that can individualize “you” from the rest
- ▶ It is not about Uniqueness but **INDIVIDUALIZATION**

What are Biometrics?

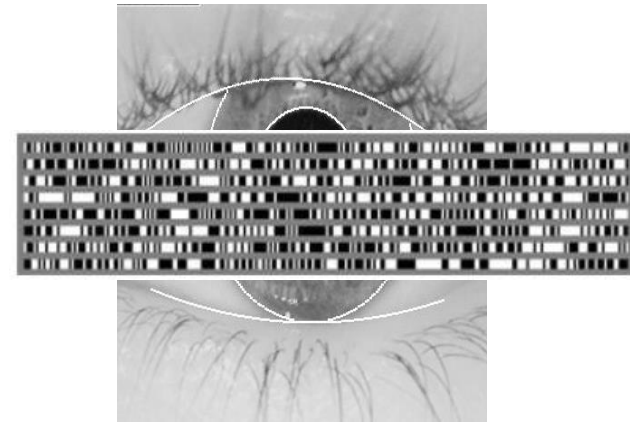
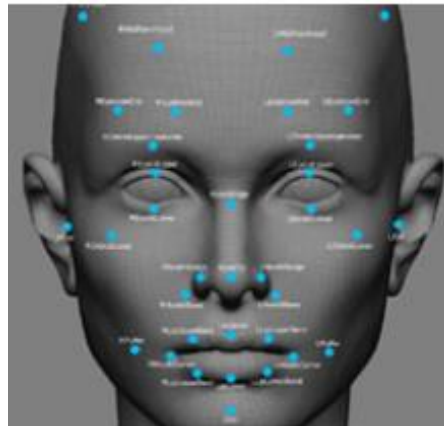
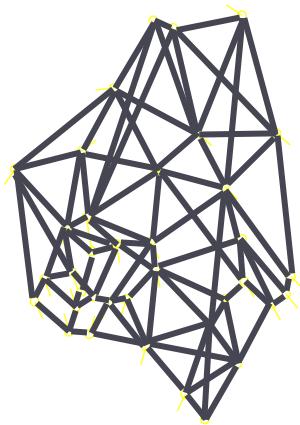
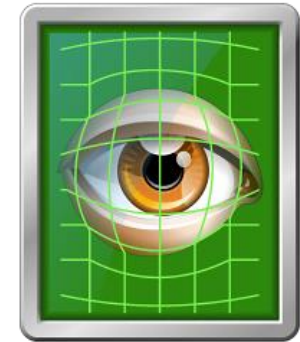
FINGER



FACE



IRIS



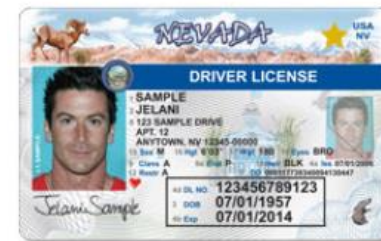
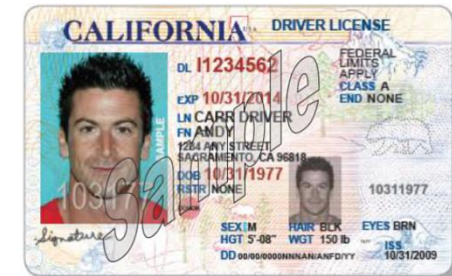
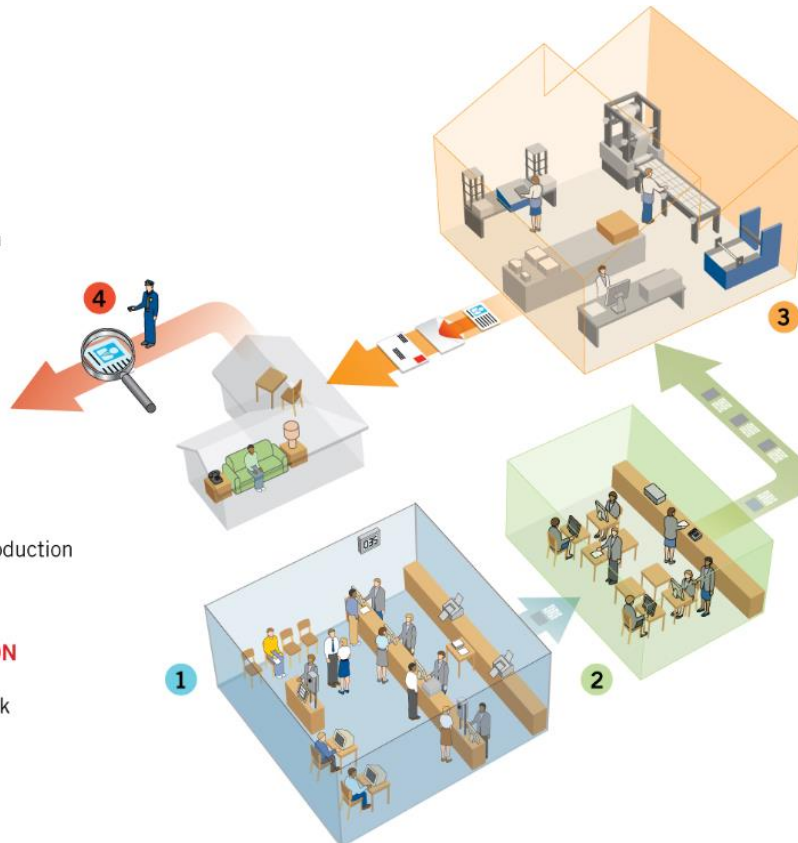
Biometrics & Positive Identification

- ▶ A biometric record is a group of biological characteristics associated with an individual
- ▶ Because we can use biometrics to individualize among other records, we can perform these tasks:
 - ▶ Identification: To search whether a person is already recorded in the database
 - ▶ Deduplication: To ensure that this person is not in the database more than once under different name
 - ▶ Authentication: To verify if this is the same person
 - ▶ Positive Identification: We can IDENTIFY/VERIFY who this person is assuming the person is in the database.

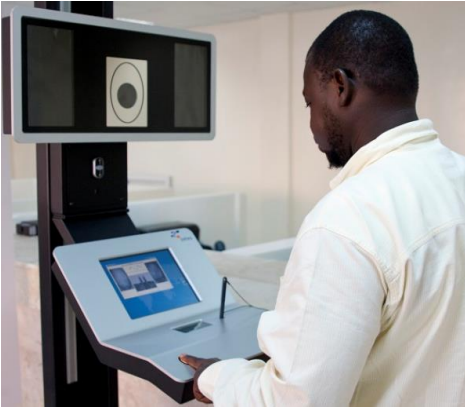
Examples of Deduplication Check

► Real ID Act – Driver License program in the U.S.

- 1 FRONT OFFICE**
 Help Desk/Greeter Station
 Enrollment Station
 Applicant Identity Verification
 Interim DL/ID
 Photo Upfront
- 2 BACK OFFICE**
 Issuance Management
 Facial Recognition
 Investigation
- 3 PRODUCTION**
 Secure, Centralized DL/ID Production
 Delivery of DL/ID
- 4 POST ISSUANCE INSPECTION**
 Authentication of DL/ID
 Detection of Digital Watermark



Biometric enrollment solution - Kiosk



Biometric enrollment solution - Kiosk



Sex Offender
Registration with Hand
Geometry



Sex Offender
Registration Kiosk
Concept Design

Biometric enrollment solution - Kiosk



CBP- Automated
Passport Check



USCIS – Applicant
Livescan



CBP – Global Entry

Biometric enrollment solution - Desktop



24 Hour Fitness – PC, keypad, fingerprint scanner



Portable field kit



Louisiana TOTS

Similar programs

New Alabama program uses selfies to prevent tax fraud



By Kelly Poe | kpoe@al.com
[Email the author](#) | [Follow on Twitter](#)
on May 18, 2016 at 6:30 AM, updated May 18, 2016 at 6:31 AM

Selfies could keep you from being a victim of tax fraud

The state Department of Revenue is partnering with identity protection technology company to prevent fraudulent tax returns.

The problem, department Commissioner Julie Mage identity is stolen there's usually no way to know until file a return - at which point, a refund has often been

"Right now, there's no federal or state stoppage that has your personal information from filing a tax return knowledge," she said. "The commissioner of the IRS myself, we remain very frustrated that after someone used to file their tax return, there is very little remedy them."

So for next tax season, Alabama taxpayers will have themselves. It's an app that authenticates your identity return is filed - and stops it from being processed on yourself submitted it. It's a totally opt-in process, but it is free for the consumer. Alabama spent \$250,000 on the tool.

Georgia and North Carolina Partner with MorphoTrust to Reduce Tax Fraud

New Grant Funds Pilot Using High-Trust Electronic ID for Tax Collection Agencies

September 23, 2015 10:24 AM Eastern Daylight Time

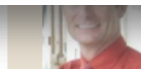
BILLERICA, Mass.--(BUSINESS WIRE)--Tax collecting agencies in Georgia and North Carolina may soon see the benefits of a highly trusted electronic ID (eID) to reduce the costly and growing problem of tax fraud, [MorphoTrust USA](#) (Safran) announced today, thanks to a new grant received from the National Institute of Standards and Technology (NIST). Building upon the 2014 NSTIC grant from NIST to test the feasibility of the MorphoTrust® eID product to improve access to state benefits, MorphoTrust, "The Identity Company," will partner with multiple states to demonstrate how a trusted eID can significantly reduce instances of tax refund theft and identity fraud.

"This grant proves that our product vision for the eID is gaining traction in areas where trusted identity is vital"

[Tweet this](#)

The Government Accountability Office (GAO) reported in 2013 that the IRS had paid \$5.2 billion in refunds to individuals with fraudulent identities that year. In this new pilot, MorphoTrust will enable taxpayers in both states to lock their tax ID by requiring the Departments of Revenue to authenticate their identities before a tax return is processed. This check will empower the true taxpayer to know if someone is attempting to file a return in their name while also giving them a means to prevent illegitimate transactions from being processed.

The MorphoTrust® eID leverages the highly trusted and secure systems of record managed by state motor vehicle agencies (MVAs). As the driver license is the proof-of-identity document we use most frequently in the United States to establish and assert our identity when identity matters, the MVA systems of record provide the most trusted and reliable foundation on which to base the eID.



to death; boyfriend now charged

Cost Estimate Breakdown

- ▶ System pricing based on a 3.8M record system with a daily 2F:2F throughput of 1,360 transactions:

- ▶ Backend biometric system hardware/software/implementation services : \$1.6-\$2M includes

- ▶ Workstation:
 - ▶ \$7,250 Verification Station desktop
 - ▶ \$7,580 Verification Station portable
 - ▶ ~\$15-25K per Kiosk depending on component options

- ▶ Monthly Fee for backend only \$40K/month. Fee would change based on the number of workstations required.

- ▶ Conversion costs may be extra.

- ▶ Maintenance estimated at ~15-18% of system/workstation prices.

Thank You

Teresa Wu
SIBA Board of Directors

Teresa.Wu@Morpho.com

714.264.8311