About Face: Facial Recognition Technology

A Jurisdiction's Perspective

Presented By

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Nebraska Department of Motor Vehicles

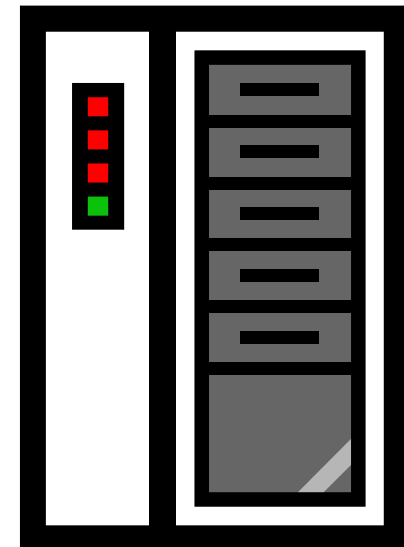# About Face: Facial Recognition Technology

- Where we started:
  - "Thought" we had an issue
    - Underage drinking
    - Constituents reported issues with cash checking, traffic convictions appearing on record, etc.

- 2003:

  - Implemented first digital driver license system (first storage of images)

    - Started to provided evidence of fraudulent activity
   - Number of complaints continued to rise

- 2005:
  - Through grant funding created Fraud Unit
    - 1 investigator (LE authority), 1 analyst
    - No authorizing legislation
    - Used existing "deputy state sheriff" authority

      §84-106 The Governor is authorized to call to his or her assistance and to appoint persons necessary to assist the Superintendent of Law Enforcement and Public Safety to enforce the criminal laws. The superintendent and his or her assistants, who shall be designated deputy state sheriffs, shall qualify by taking and filing an oath in writing. The superintendent and his or her assistants shall have the same powers in each of the counties of the state as the sheriffs have in their respective counties, insofar as the enforcement of the criminal laws is concerned.

- 2007:

  - Anti-Fraud data scrub – used FR to scrub entire data base of images captured since 2003 (approximately 2.5 million)

    - 15,000 cases of potential fraud

  - Evidence we have an issue that needs to be addressed
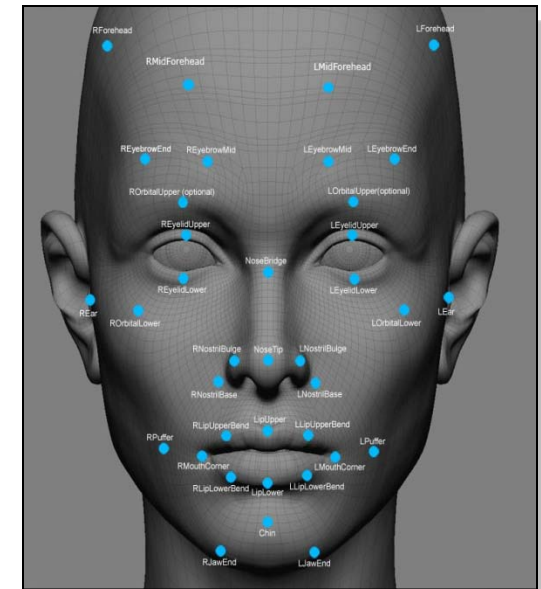
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- 2008:
  - 1st of 2 driver license security bills passed
    - It is the intent of the Legislature ... protect the identity of applicants for and holders of such licenses & reduce identity theft, fraud, forgery, and counterfeiting to the maximum extent possible. The department shall adopt security & *technology practices* to enhance the enrollment, production, data storage, and credentialing system of such licenses in order to maximize the integrity of the process.

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- 2009:
  - Expanded Fraud Unit
    - Addition of 2 investigators & 1 analyst
    - 2 temporaries to complete Anti-Fraud review
  - Incorporated Facial Recognition technology into new gated, central license issuance process
    - At the counter – 1:R
    - Overnight, prior to producing/mailing license 1:R and 1:N
      - 450 leads reviewed daily – 2.5 cases

- July 2009 – December 2010:
  - Over 90% of suspects identified have prior criminal histories
  - Small portion are underage drinking related

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- Charges being filed:
    - Income tax evasion
    - Social security fraud
    - Immigration violations
    - Outstanding warrants (misdemeanor & felony)
    - Sex Offender Registry violations
    - Title fraud
    - Bank fraud
    - Unemployment fraud
    - Bankruptcy fraud
    - Insurance fraud
    - Benefits fraud (welfare, housing, etc.)
    - Avoiding license revocation/retesting

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- 2011:
  - Secured Real ID grant funds to enhance FR system
  - Proposed integration of images from
    - Department of Corrections
    - State Probation Office
    - Nebraska State Patrol (AFIS)

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- 2012:
  - Completed integration of images from
    - Nebraska Criminal Justice Information System (central repository of booking photos from all NE jails)
  - Scheduled integration for late 2013
    - Department of Correction images
  - Booking photos are part of the daily leads generated from document issuance process
  - Increased number of daily cases to 3

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- 2012:
  - Other benefits from integration project
    - Upgraded to current technology
      - Technology advances made in 3 year period from initial implementation to upgrade were significant
        - » System is more robust
        - » Matches are better
    - Altered the thresholds for creating daily leads
      - Increased 1:N
      - Decreased 1:R

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- Other technology advances:
  - Image captured process changed significantly from 2003-current
    - ICAO technology standards used
    - Alerts examiners to image quality issues which increases match capability and enrollment into FR
    - Images crisper, more clear, better color

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- 3 case examples from DL issuance process:
  - Discovered dual ids to same individual
    1. Victim in TX was contacted in 2009
       - Victim since 2000
       - IRS was attempting to collecting over $100,000 in back taxes, penalties, & interest
       - Reported multiple times
    2. Suspect was wanted for attempted murder in OK
    3. Lead to discovery of 6 individuals using same identification in 6 states

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- Unexpected benefits of FR:
  - Capability to introduce an outside image for matching purposes
    - Investigation of reported cases of identity theft
    - Offer this service to law enforcement agencies for cases being investigated and/or prosecuted in a criminal manner
  - Law enforcement photo lineups
  - Face Examiner Workstation added in 2012
    - Enhance & modify images to improve results

- LE assistance:

17 of 20 suspects identified in homicide investigation – 1 eventually convicted

- LE assistance:

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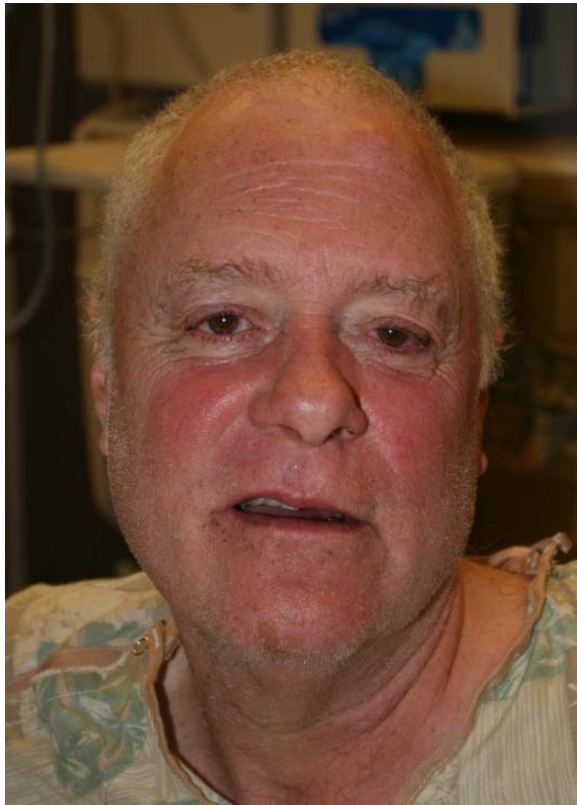
- Partnership Opportunities:
  - Access granted to DMV FR system
    - Nebraska State Patrol
    - Omaha Police Department
    - Lincoln Police Department
    - Nebraska Department of Corrections

Questions?

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