



Face4 Systems Inc.

Face Recognition on the Move

Ilan Arnon

Face4 Systems



- Ottawa, Canada
- Since 2000
- Face Recognition Solutions

FR on the Move



Face Recognition on the Move



The screenshot displays the Face4 ACE adjudication interface. A central mobile device overlay shows a search for 'Ilan Arnon' with a confidence score of 0.68. The interface includes a 'Probe' image, a 'Lookout' image, and a 'Test_F4' image. A 'Comments' button is visible next to the 'Lookout' image. The interface also features a 'Advanced search' section with filters for 'All', 'New', 'Active', and 'Resolved'. A list of results is shown, including 'RK Hong' (12), 'Ilan Arnon' (1), and 'Joey BM'. A map view is visible at the bottom right, showing a location with a yellow line. The interface is logged in as 'face4' and shows the version '3.0.2273.0'.

Configuration editor | Watchlist Management | Adjudication Station | Adjudication Station

10.0.35.210/Adjudication/F4T60

Probe

Alert List | More Details

Ilan Arnon

0.68

Lookout: 13
Gender: Male

06/17/2016
Test_F4

ID:2226051

Comments

Advanced search

Not Found | Released | Referred

Adjudicate

All | New | Active | Resolved

RK Hong
12

Ilan Arnon
1

Joey BM

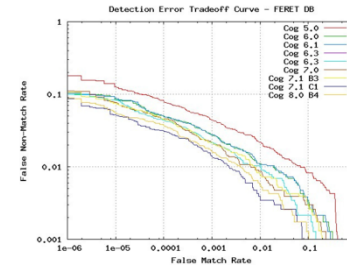
Logged in: face4 | Log out | English

Version: 3.0.2273.0

Enabling Face Surveillance



- Matching algorithms
- Cameras
- Processing



CBSA Faces on the Move



Toronto Pearson Airport T3



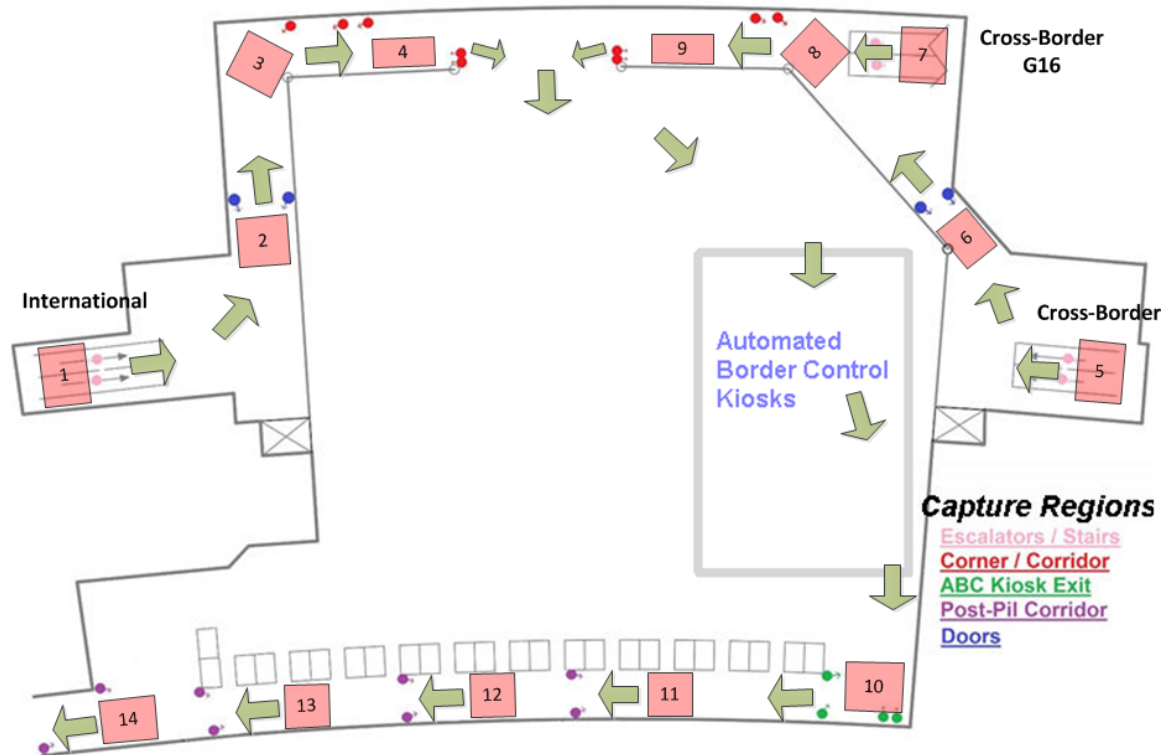
Objective:

To assess the readiness of face surveillance technology
in a semi-constrained environment

Performance
Operational

Test Setup

- CBSA-controlled area
- 31 Cameras, 14 Zones



Performance Testing



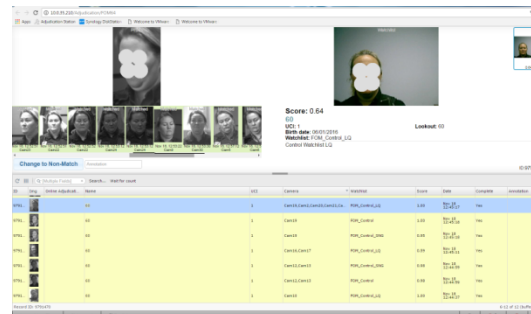
- 65 test subjects, 3 watchlists



- Test walkthroughs
>1200
Truth Data



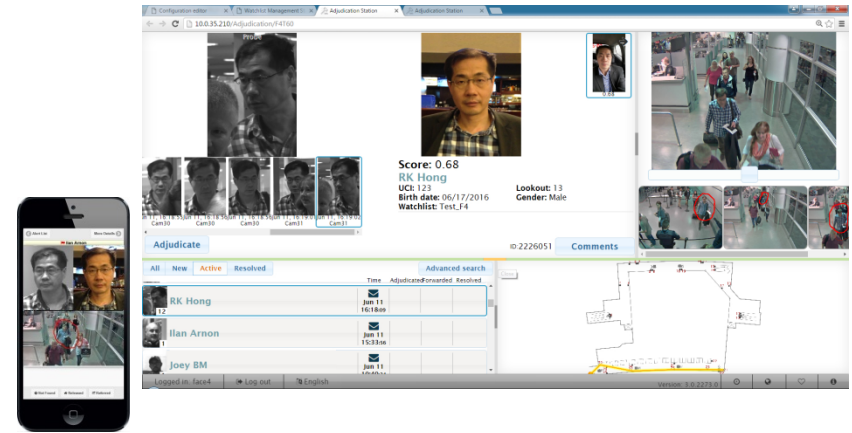
- Offline Adjudication



Operational Testing



- Operational Watchlist:
5000
- Real Travelers:
15,000-20,000/day
- Real-Time Adjudication
CBSA Officers
Surveillance, Roving



Performance Metrics

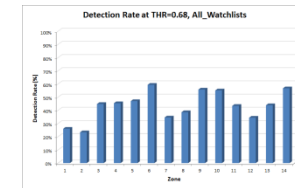
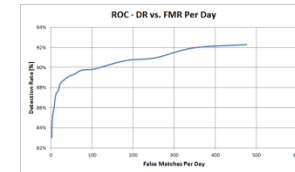


Detection Rate (1 – FNIR)

Test walkthroughs, 1200

Offline adjudication

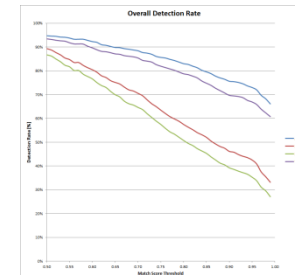
Per route, zone, camera



False Match Rate

Real travelers

Operational watchlist



Results



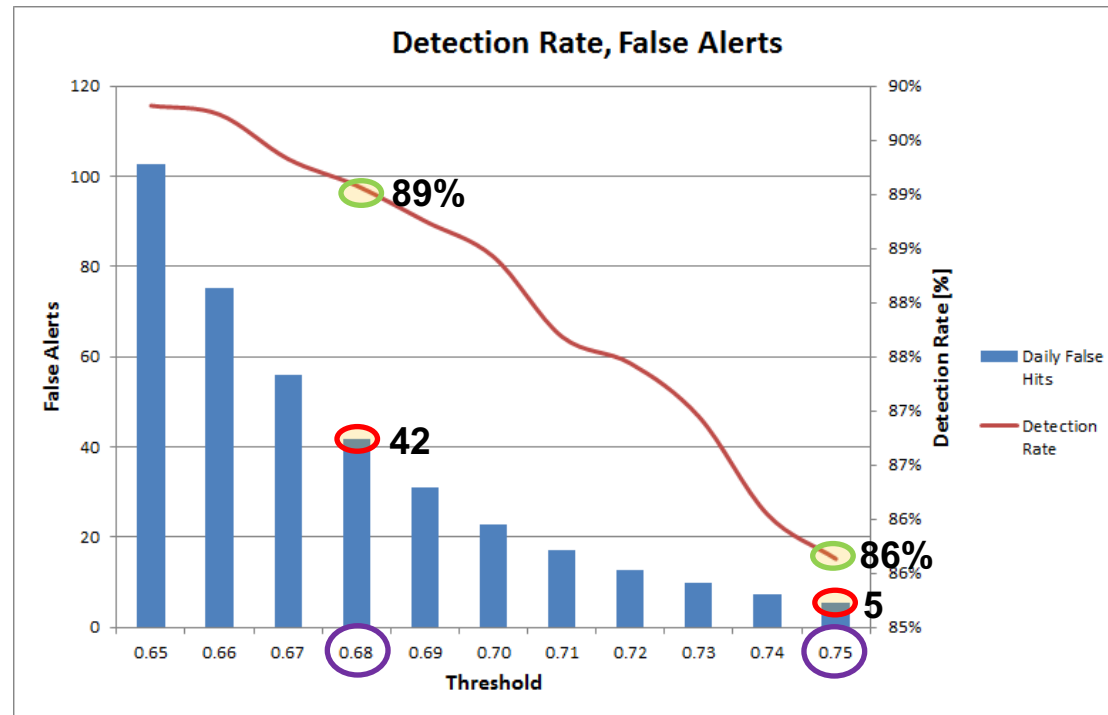
89% Detection Rate

Best route: 93%

Best 4-zones: 89%

47 Real Hits

Operational watchlist



Escalators



Doorways



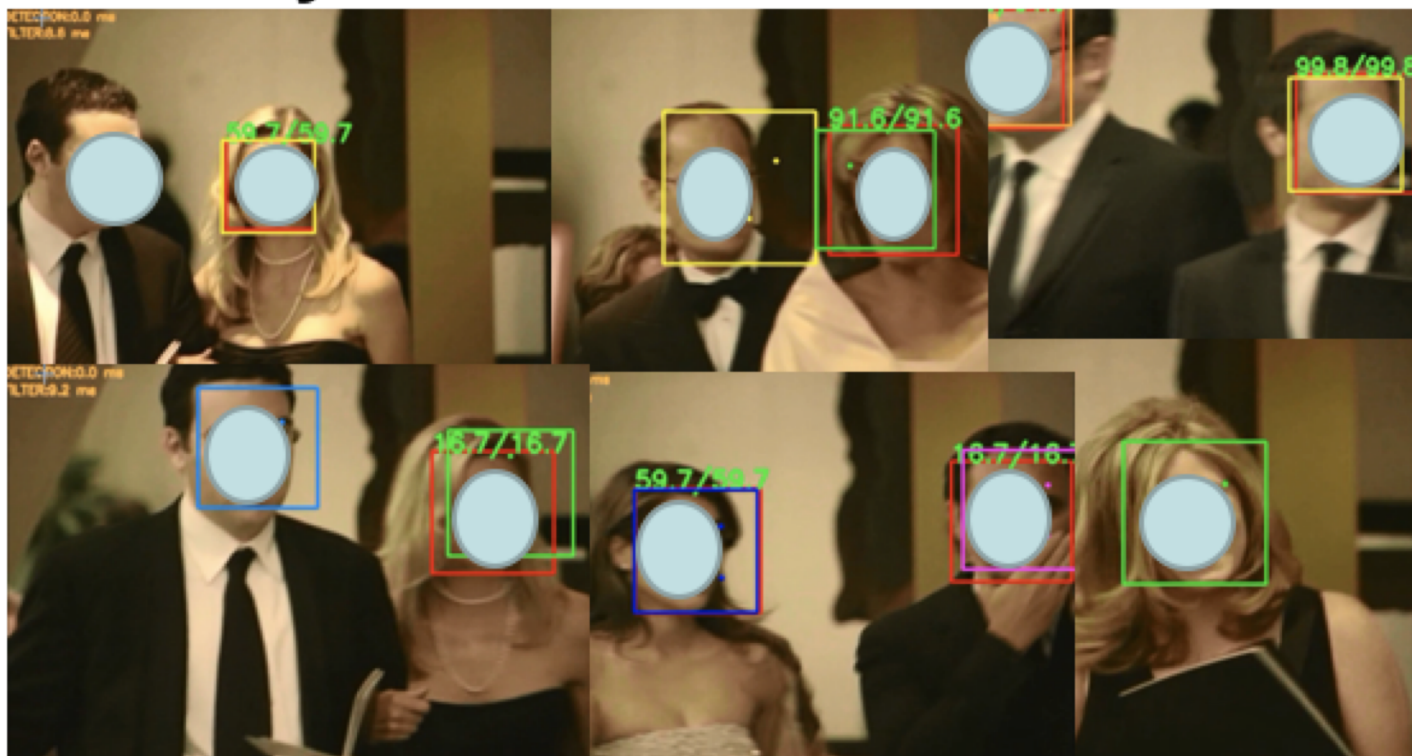
Corridor



Corridor, Egress



Academy Awards



Transit



Manila MRT



Stadiums



PGE Arena Gdańsk



Gaming



Casino de Montréal

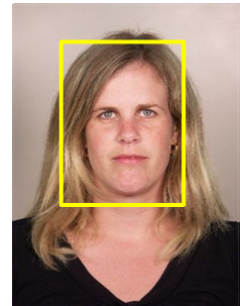


Face Recognition on the Move

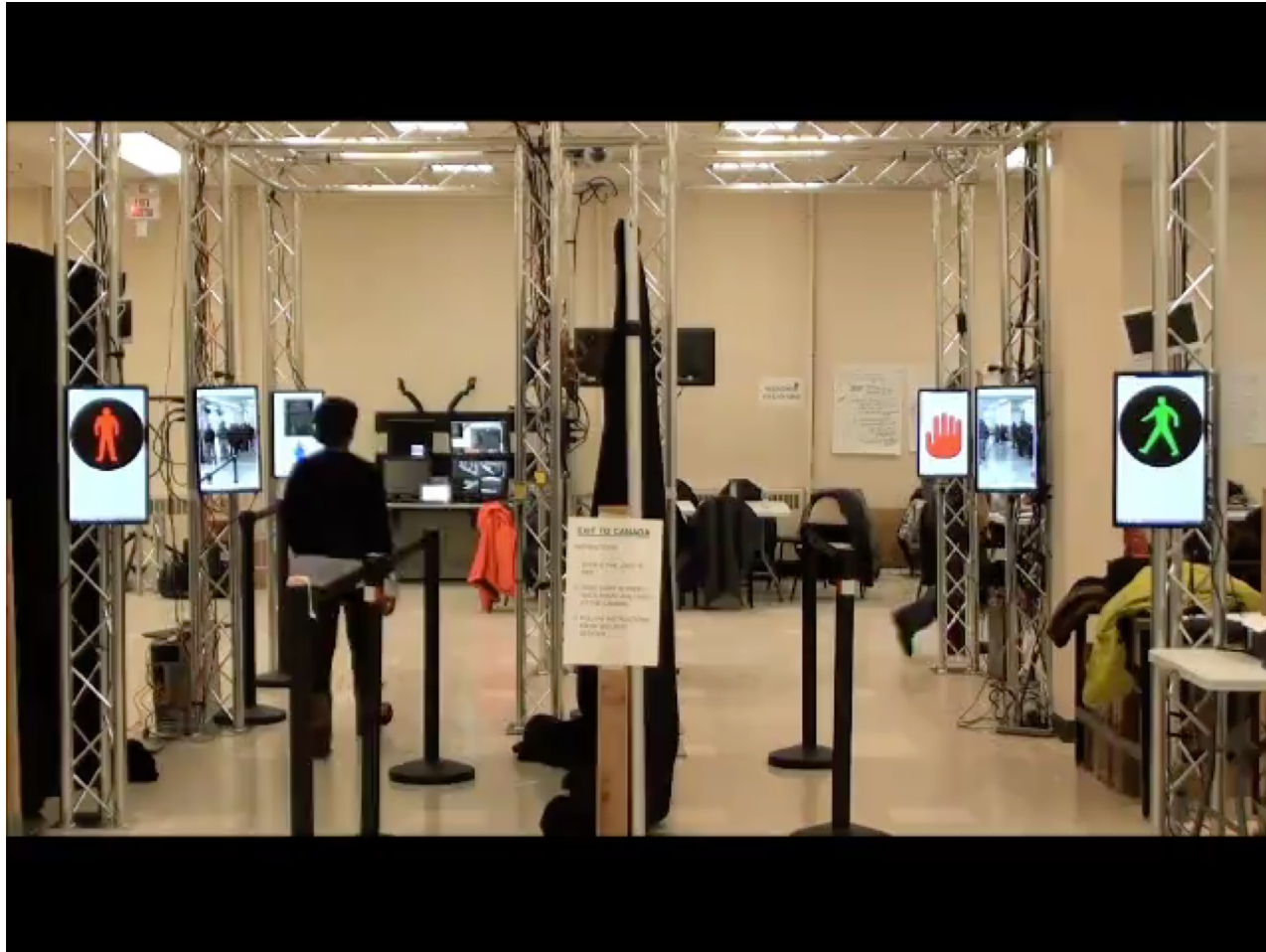


Cooperative

- Border



CBSA Chain of Trust



Questions

Ilan Arnon

ilan.arnon@face4systems.com

www.face4systems.com