Biometrics and Fast Reaction to Epidemics

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Our Products

Made in Canada

Fingerprint and Vein Recognition

Android OS

2.4” Capacitive Touchscreen

Anti-microbial Gorilla Glass

IXM SENSE

IXM TOUCH

IXM MYCRO

4 sensor options

PoE, Wi-Fi, Bluetooth

Standalone operation

20,000 (1:N), 100,000 (1:1)

<1 sec authentication
About me…

• My work history includes over 25 years of Research and Development in the domains of Defence, Microelectronics, Surveillance, Medical and Biometrics
• Fingerprint recognition algorithms approved by NIST (MINEX 09)
• Advanced research and original implementation for Fast Fingerprint Search on embedded environment (devices)
• Patent in Automatic License Plate Recognition System (ALPRS)

• Some publications:

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What is Biometrics?

Biometrics are unique physical characteristics and the only solution to prove that

You Are Who You Say You Are.

Classic Security Requirements
- What you have (Pass Card)
- What you know (Password)
- Who you are (Biometrics)

Biometric Convenience
- No passwords to remember
- No keys to enter
- No cards to enter

Time & Attendance
- Eliminate time theft
- Authentication
- No buddy-punching

Fingerprint
Face
Iris
DNA
Human Face

- Human Face plays an important role in social interaction
- The Face reflects people’s identity
- Can be used as a key in security
- Collecting Face Biometric is a non-contact process
- Facial Recognition technology has received significant attention lately
Face Recognition

• Easy to collect and maintain databases of facial images

• Samples can be collected from distance without person’s participation

• Strategically placed HD cameras can create a network collection of facial images

• Potential threats can be fast identify and human action can be taken to validate the threat and neutralize it
Epidemics

- Deadly and unpredictable, remember the Spanish Flu (1918, 50m-100m death)
- Ebola, recently, is an example, killed more than 11,000 people (mostly in Africa)
- No vaccine, yet
- Easy to spread, no test till you are symptomatic
- Some companies already have devices to detect symptomatic patients
Fast Reaction To Potential Epidemics

- Terrorist can collect infectious fluids from the epidemic site (like Ebola in Africa) and infect people

How can we react?

- Create a network of testing centers for potential epidemic threats
- Connect the analysis result to cloud databases
- Use facial recognition input to identify the carrier/spreader
Multiple Biometrics Products
With
Chemical and Biological Attack Detection
In Cloud Computing

Fingerprint Recognition (present)
Vein Recognition (present)
Facial Recognition
Voice Recognition
Gait Recognition
Chemical Attack Detection
Biological Attack Detection
THANK YOU

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