Face Biometrics Authentication

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The Root of The Problem

The Basics of Authentication

Something you know

Something you have

Something you are

SOMETHING YOU KNOW

MPuz,/?rSw@SH&94Tea)

- The password above is a good password
- Your passwords don't look anything like that…
- …and, you'd need a different one for *every* account
- A good password is inconvenient,

  an inconvenient password will not be used

- This is a very common problem

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Something you have

- How many identifying objects can you carry around?
- That cannot be copied?
- That will not be lost, stolen, or forgotten?
- That are easy to distribute and manage?
- That are not expensive?

How to Solve the Problem

Convenience

Security

IsItYou Authenticates People

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User Names/Passwords are out

Biometrics is the new Cyber Identity

IsItYou Face Recognition

Convenience that drives

THE SOLUTION

- **Convenience that drives security – take a selfie to authenticate**
  - Reliable authentication in the most demanding lighting conditions
  - Easy to use - works on any handset without any user interaction
- **World's ONLY face biometrics that can detect and defend itself from attacks by non-humans (picture, mask)**
  - It does not require interactions from the user to work
  - No need to blink, or smile on cue
- **From password management to identity management**

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A bee won't be fooled by a plastic flower

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A lion won’t eat tofu

Real

Fake

Your authentication system should know the difference

IS IT YOU

Real

Fake

Your authentication system should know the difference

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IsItYou Authentication

because

every other Face Recognition system can be defeated

THE TECHNOLOGY

The Face Recognition Engine

- Works in all light conditions
- ~100% identification accuracy and 99.98% usability
- False Acceptance : less than 1 in 100,000;
- False Rejection Rate: less than 2%
- No pictures stored anywhere, preserving privacy

Anti-Spoofing Engine

- Single-frame detection of non-human intruders
- Each image is analyzed by 13 independent intrusion detection functions
- Works on still pictures, video, even masks
- Requires no input from user

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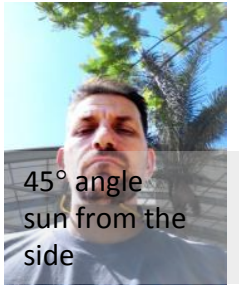
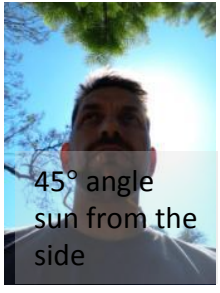
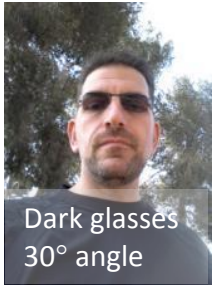
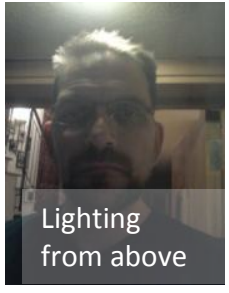
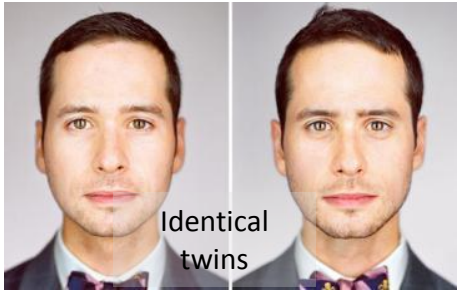
WORKS EVEN IN EXTREME CONTEXTS

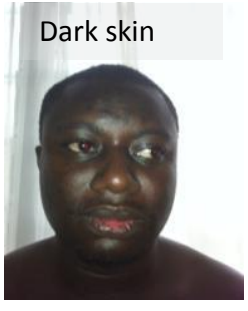


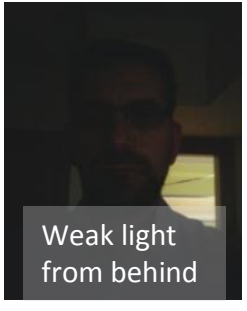


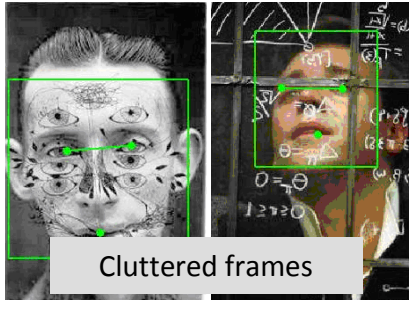


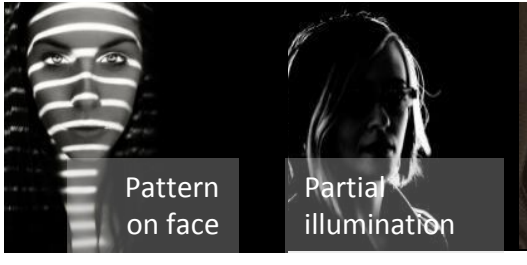


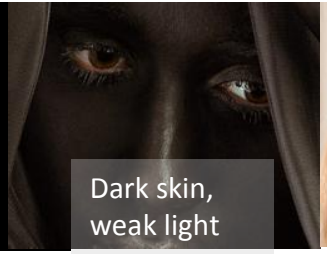


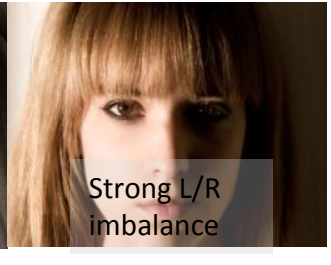


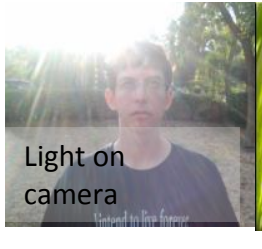


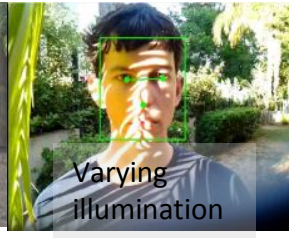












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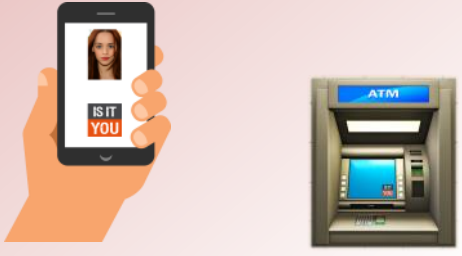
Some Use Cases

Authentication on Mobile – Access to Cloud Services

2nd Factor Authentication for Web Services

2nd Factor for Automated Teller Machines



Customer Care – Authenticating Users

Workstation Log-in

Your Face is Your Key

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Technology Demos

- **Our SDK anti-spoof capabilities compared to competition:** https://www.youtube.com/watch?v=xHGl6SaB-RA
- **Opening a door with your face:** https://www.dropbox.com/s/8upj1lul2saemzq/FR%20based%20door%20lock-unlock.mp4?dl=0
- **Credit card wallet application:** https://www.dropbox.com/s/szqdmgab2ojwvyh/iOS%20version.mp4?dl=0
- **Operating in the dark:** https://www.dropbox.com/s/huuweydag2xt9jk/LGG3.mp4?dl=0
- **Match during walking around:** https://www.dropbox.com/s/duwyipu3f6evq8m/wlaking%20around.mp4?dl=0
- **Working on a tablet:** https://www.dropbox.com/s/dxg3xxct9a6lcxe/VID_20140911_120155.mp4?dl=0
- **Identification in a crowd:** https://www.dropbox.com/s/zgdbdz9lrui8gve/20150720_141929.mp4?dl=0
- **Coca Cola password recovery:** https://www.dropbox.com/s/5dpqb2knc9rdkac/CC%20PoC.mp4?dl=0
- **Automatic identification in the cloud:** https://www.dropbox.com/s/ge845trxyaeg858/door%20unlock-%20identification.mp4?dl=0
- **Web service (cloud) identification (notice the speed):** https://www.dropbox.com/s/sdcuyxcupfu4hke/web%20service%20alpha.mp4?dl=0
- **2FA (2 factor authentication):** https://www.dropbox.com/s/vtiewbxcmyi9p53/VID_20140903_113327.mp4?dl=0
- **Web service operating in very low light:** https://www.dropbox.com/s/rga5onkavm8ikvk/web%20service%20low%20light.mp4?dl=0
- **IsItYou working in the ING environment:** https://www.dropbox.com/s/te4elg54cohlnaf/IsItYou%20on%20ING%2C%20authentication.mp4?dl=0

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