Datasets on Iris Spoof Detection

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ATVS-Flr DB

No. of Samples: 800 Real + 800 Fake

No. of Subjects: 50

Status: Acquired

Light Source: NIR (Near Infrared)

Fake Type: Printed

Website:

http://atvs.ii.uam.es/atvs/fir_db.html

ATVS-Flr DB Description

Real Samples:

The Real samples consists of 4 sample of both iris images of 50 subjects taken in two sessions with the sensor LG Iris Access EOU3000.

50 subjects * 2 iris * 4 samples * 2 sessions = 800 Real Images.

Fake Samples:

The Fake samples are also acquired with the same sensor from high quality <u>printed images</u> of original samples. Same number of samples - 800

ATVS-Flr DB Samples

Real Samples







Fake Samples







LivDet-Iris Clarkson Subset

Sensor: LG IrisAccess E0U2200

Status: Acquired

Fake Type: Printed + Patterned

Contact Lens

Clarkson Dataset Description

Three Types

- Live Images
 - 2469 (train) + 1485 (test) acquired from 25 subjects each.
- Patterned Contacts
 - 20 different patterned contact types
 - 1122 (train) + 765 (test)
- Printed (NIR + Visible)
 - 1346 (train) + 764 (NIR) + 144 (visible)

Clarkson Dataset Samples



IIITD Contact Lens Iris Database

Subjects: 101

Samples: 6570

Sensor: Cogent dual iris sensor (CIS 202) and VistaFA2E single iris sensor

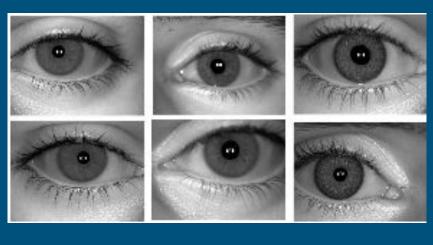
Status: Acquired

Type: Live + Contact Lens (soft + textured)

IIITD CLI DB Description

- The lenses used in the database are soft lenses manufactured by either CIBA Vision or Bausch and Lomb.
- For textured lenses, four colors are used.
 - Gray
 - Blue
 - Hazel
 - Green
- For each subject, both iris are captured with no lens, soft lens, textured lens with a minimum of 3 images for each.

IIITD CLI DB Samples



Live (No lens)

Soft Lens

Textured

IIITD Iris Spoofing Database

Subjects: 101

Samples: 4848

Printer: HP Color LaserJet 2025

Scanner: HP flatbed optical scanner

Status: Acquired

Fake Type: Print+Capture, Print+Scan

IIITD Iris Spoofing DB Description

- Constructed from IIITD CLI Dataset using printer and scanner.
- In the print+capture attack, input to iris scanners are printouts of the images.
- In print+scan attack, printout of an iris image is scanned using a flatbed scanner and then it is used to perform attack.

IIITD Iris Spoofing DB Samples



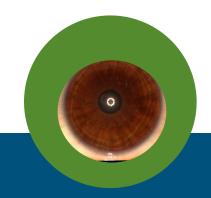
Print + Scan

Print + Capture

Other Datasets









IIT Delhi Iris DB

- 224 Subjects
- JIRIS, JPC1000, digital CMOS camera
- 1120 Images

Poly Iris DB

- Bispectral Visible and Iris
- 209 Subjects 12,540 images
- Normalized Iris Images

UPOL Iris DB

- 384 Images
- TOPCON TRC50IA optical device connected with SONY DXC-950P 3CCD camera.

Clarkson - 15,13

- Printouts and contacts Spoofs
- Acquired from LG and Dalsa scanners

Are Normal Datasets Necessary?

- Absolutely, they can be used for the features of live images.
- These live images can be modified to create spoof datasets.
- Like printing the iris images, combine two iris etc..

More Datasets on the way

- WVU Mobile Iris Spoofing Dataset
- LivDet 2017 Liveness
 Detection-Iris -- Warsaw Subset
- ND_Cosmetic_Lenses_Dataset_ 2015 dataset
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Thank You