CSE 40537 / 60537: Biometrics

Face Recognition 4
CMU PIE (2000)

68 people x 13 poses x 43 illumination conditions x 4 expressions
CMU Multi-PIE (2009)

337 people and over 750,000 images
BANCA (2004)

52 (even gender split) people and 12 recording sessions

Controlled  Degraded  Adverse
FRGC (2006)

- 50,000 recordings
- Goal: 98% GMR at 0.1% FMR (verification)
MBGC (2008)

Unconstrained Face Verification

- Realistic Mugshot and Passport Photos
GBU (2011)

Same Person?

“Good”  “Bad”  “Ugly”
ScFace Database (2011)

- 4160 static images (visible and infrared) of 130 subjects
- 3 distances
- 5 cameras
LFW (2007)

• Unconstrained Face Pair Matching on Web Images
• *De facto* face recognition benchmark standard
• Over 13,000 images
FDDB (2010)

- Companion data set to LFW
- 2,845 images with a total of 5,171 faces
- The specification of face regions as elliptical regions

QLFW (2014)

- JPEG compression
- Additive white noise
- Gaussian blur
- Contrast change
Face Database: PubFig (2009)

- LFW is broad, but small and shallow per person
- Pubfig is narrow, but large and deep per person
  - 58,797 images of 200 people
AFLW (2011)

- 25,000 faces
- 380,000 ground truth annotations
Janus Benchmark A (2015)

500 Subjects

- Images and video
- Wide geographic variation
- Identification & verification
- Open set protocol