Professor Xin Chen, Biometrics, Fall 2016
Assignment: Design and Evaluate a Face Recognition System

Objective: Students will design and evaluate a face recognition system using the data provided and an open source face recognition software.

Data

Face images taken from different subjects.

Tasks

1. Familiarize with the data. Design your own gallery and probes using all possible subjects.
2. Use open source software (or your own) for face matching and generate genuine and imposter distributions.
3. Draw ROC curve and report your findings.
4. Draw CMC curve and report your findings.

Sources that might be useful:

1. OpenBR
2. OpenFace
3. Face++
4. OpenCV FaceRecognizer
5. Matlab Computer Vision Tools

Note that some of the software may need training process. In that case, you can only use your gallery as training set and test it on probes.

Submissions

1. Clear description about how you design the face verification/recognition system.
2. All source code you developed.
3. A report including the open source software you use, how you handle the data, genuine and imposter distributions you get, the ROC curve, the CMC curve and your findings.