Readme

FR_SURV SURVEILLANCE FACE DATABASE

Database Description

FR_SURV database was designed mainly as a means of testing face recognition algorithms under surveillance scenarios. In such a setup, one frontal mug shot high resolution image is compared to a low quality video surveillance still image. In order to achieve such a setup, images are captured outdoor using surveillance cameras. The frontal mug shot image are captured using high resolution cameras in laboratory conditions.

Image acquisition: equipment setup and imaging procedure

The outdoor images are captured (without zoom, pan and tilt) from a distance of 50-100m, placing the surveillance cameras at around 20-25m of elevation. For the indoor images, the subjects are requested to sit (indoor) in front of the camera, at a distance of 2-3m, and asked to rotate their face at different yaw angles, so that we can obtain different profiles of their faces; whereas for outdoor samples, the set of subjects were requested to walk (stroll) on a lane where a surveillance camera with a large field of view was used to capture the subjects in motion. This database has been acquired using Sony 3CCD Video Cameras (Model EVI-D70P). The outdoor samples have been acquired at different times of the day.

Database Composition

The database has been built for 51 subjects, with 40-50 frames per subject in gallery and 20-30 frames per subject in probe partition. We have obtained these samples using VJFD on indoor and outdoor datasets. We have manually identified 20 near-frontal faces per subject from both the training and test sets of the database. The ambient condition and contrast are not same for gallery and probe samples. The average resolution for gallery samples is 250 X 250 pixels, while for the probe samples it is 45 X 45 pixels. Tightly cropped VJFD samples have an average resolution of 150 X 150 pixels for the gallery samples and 33 X 33 pixels for the probe samples. Also, there are minor expression and pose (near frontal) variations across samples of a given subject.