## **Assignment 7 - Bank Robber Facial Reconstruction**

Due November 11, Tuesday



(100%) The above images are screenshots of a bank robber from a bank's surveillance camera. As you can see, the face was blurred and not in a frontal position. Now, please use FaceGen to reconstruct his face in 3D and generate the frontal facial image.

Input: Bank Robber's facial images from the video.

Output: Reconstructed frontal face and biometric parameter values.

## Here is the suggested procedure:

- 1. Download FaceGen, if you have a PC.
- 2. Create a face based on the images given from Assignment 7 folder.
- 3. Rotate the 3D model to the same position in the photos.
- 4. Adjust facial parameters of the 3D model to fit the photo (see the Excel data)
- 5. Take a screen shot of the 3D model in the photo position.
- 6. Take a screen shot of the 3D model in the frontal view.
- 7. Fill in the values to the spreadsheet for facial biometric parameters.
- 8. Zip the reconstructed frontal face and the spreadsheet and submit the file to BB.

(Bonus 20%) Analyze the reconstruction data collected from the class and write a report about the convergence of the facial biometric data and determine which one is the closest one to the ground truth.