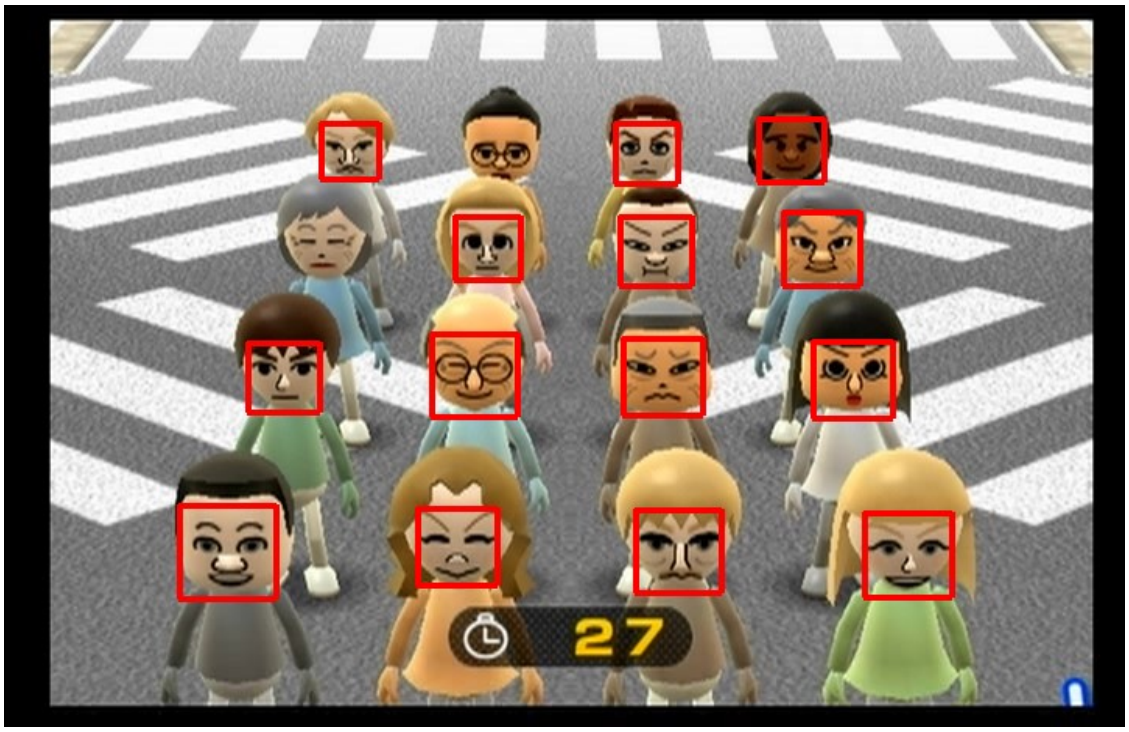
COS429

Computer Vision

Homework No.4

Due: 11:59pm, Tuesday, November 4, 2008

This programming assignment is concerned with using OpenCV to detect faces. OpenCV has provided a boosted cascade face detector which implements the original Viola-Jones algorithm [1]. For this homework, a trained detector will be provided. Please follow the instruction http://opencvlibrary.sourceforge.net/CvReference#cv_pattern_objdetection, and write your facedetecor executable which takes the image file as input and outputs an image with detections overlaying on top of the original image, see example below.



The data for this assignment can be found in the directory:

http://www.cs.princeton.edu/courses/archive/fall08/cos429/hw4/Faces.jpg

http://www.cs.princeton.edu/courses/archive/fall08/cos429/hw4/wii_frontalface4.xml

Submission: Please submit the c++ code, executable, and output image to Blackboard (https://blackboard.princeton.edu/).

References:

[1] P. Viola and M. Jones. Robust real-time object detection. In International Journal of Computer Vision, 2001