

Cognitive Robotics

Extra Assignment 12

Due Tuesday, January 21st, before class.

RHEINISCHE COMPUTER SCIENCE VI FRIEDRICH-WILHELMS-UNIVERSITÄT BONN INTELLIGENT SYSTEMS

AUTONOMOUS

Prof. Dr. Sven Behnke Endenicher Allee 19a

12.1) Download the OpenCV library from http://opencv.org and install it on your computer.

Familiarize yourself with the use of the Viola & Jones frontal face detector.

Apply it to an own image containing at least 8 faces.

Alternatively, you may use the following image:

http://www.ais.uni-

bonn.de/nimbro/Humanoid/images/RC19/RoboCup 2019 Team NimbRo.jpg

a) Show the detected faces.

8 points

b) How many faces are correctly detected?

How many faces are not detected?

How many false positives are detected?

6 points

c) Compute precision, recall, and F1 score of the face detector.

6 points