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**AGH UNIVERSITY OF SCIENCE
AND TECHNOLOGY**



QART AGH FACE RECOGNITION TEST-PLAN

Piotr Romaniak, **Mikołaj Leszczuk**, Lucjan Janowski, Ryszard Mirek, Artur Koń

PROBLEM

How to assess human effectiveness of face recognition?

WE HAVE: CCTV VIDEO SHOWING SHOTS OF FACES

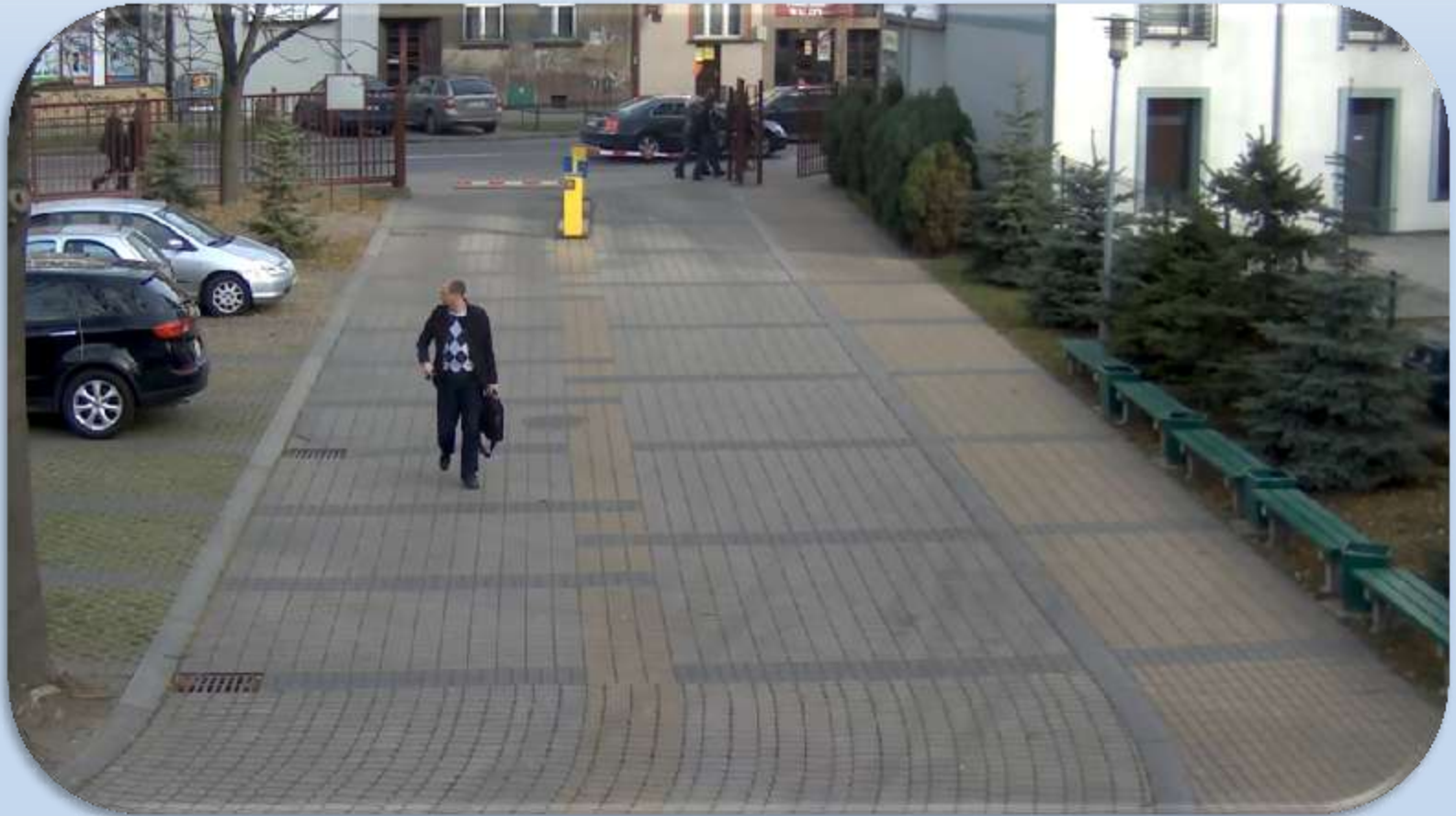
FACE (PERSON) RECOGNITION TESTS



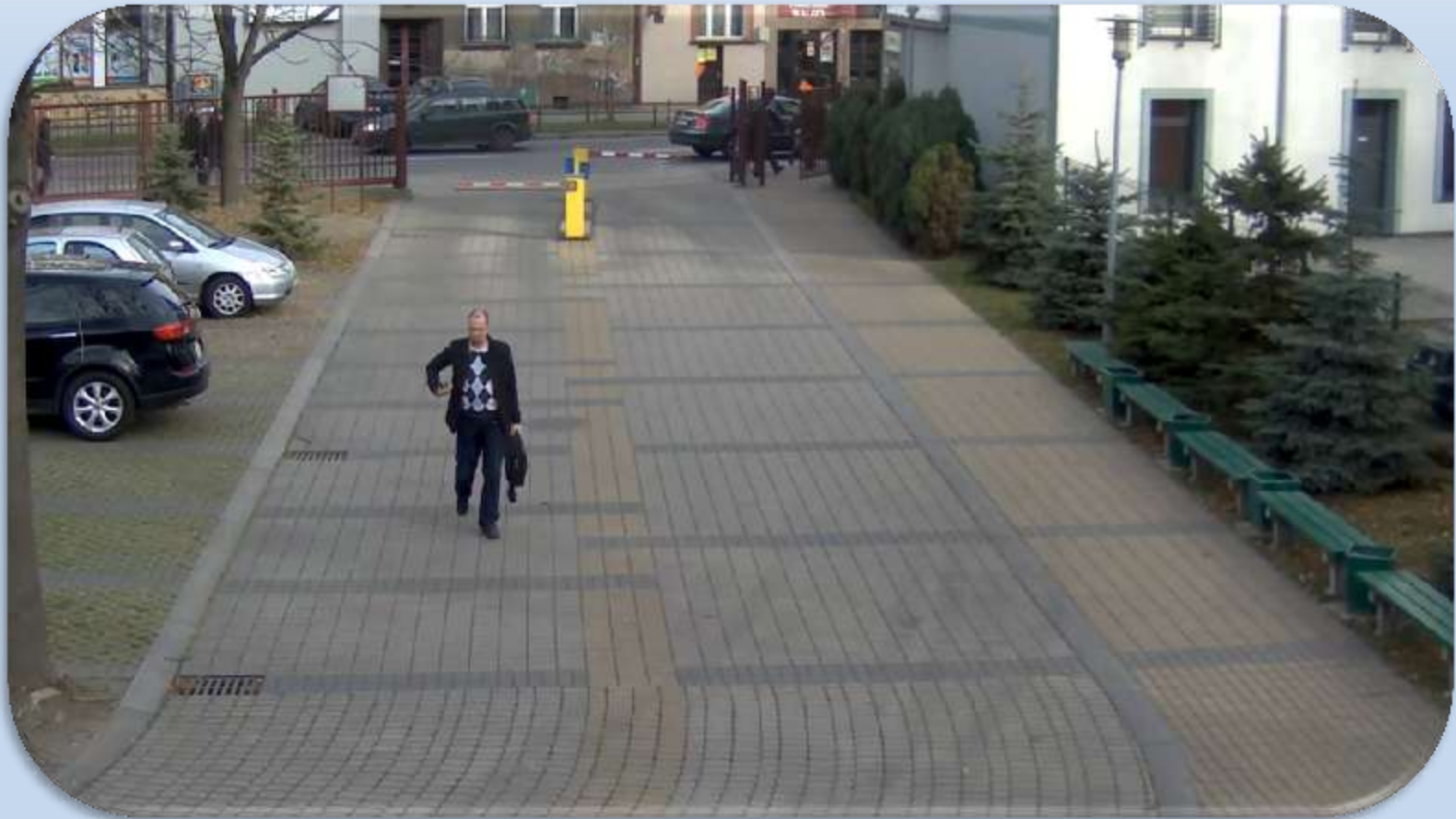
FACE (PERSON) RECOGNITION TESTS



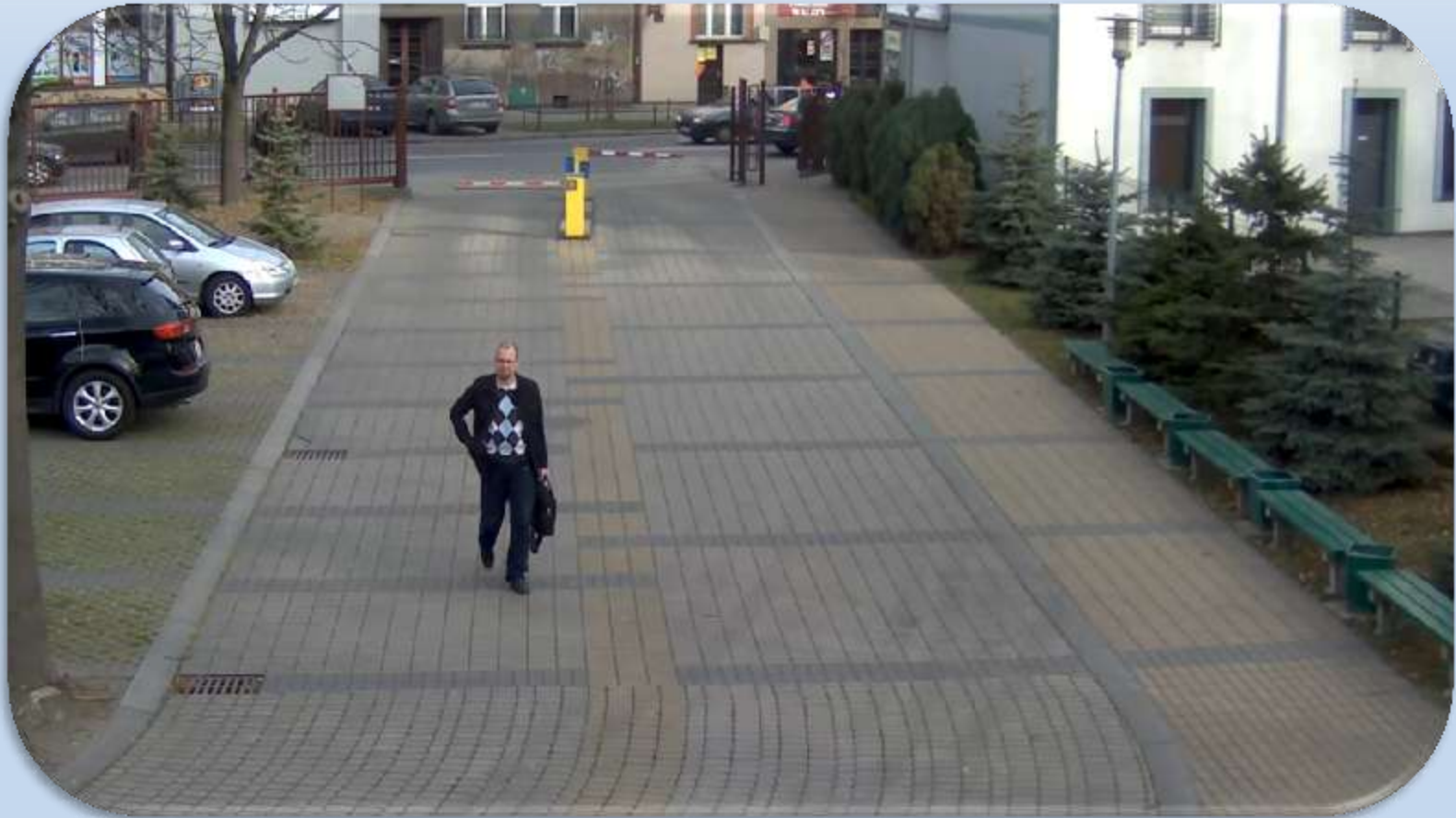
FACE (PERSON) RECOGNITION TESTS



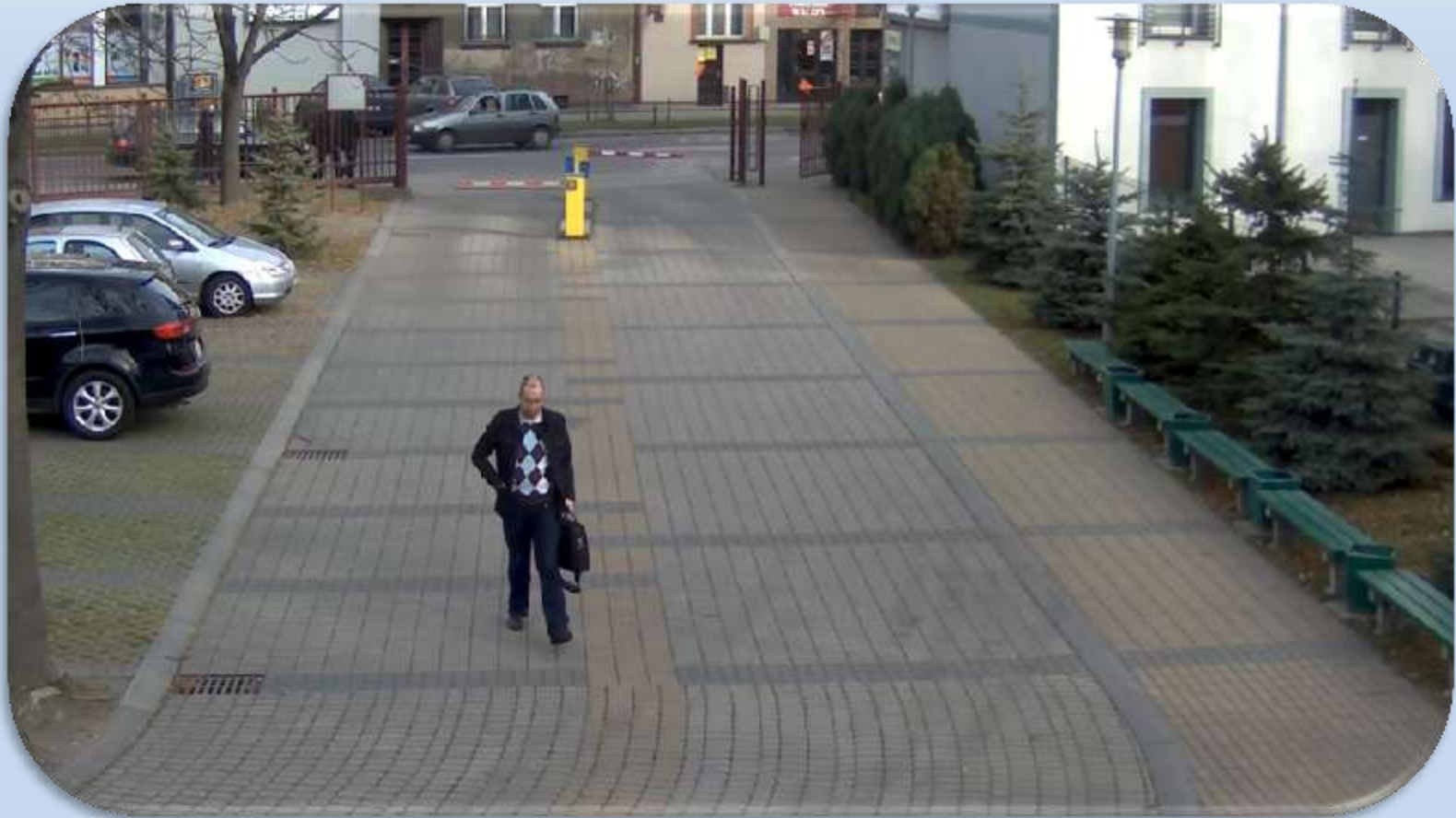
FACE (PERSON) RECOGNITION TESTS



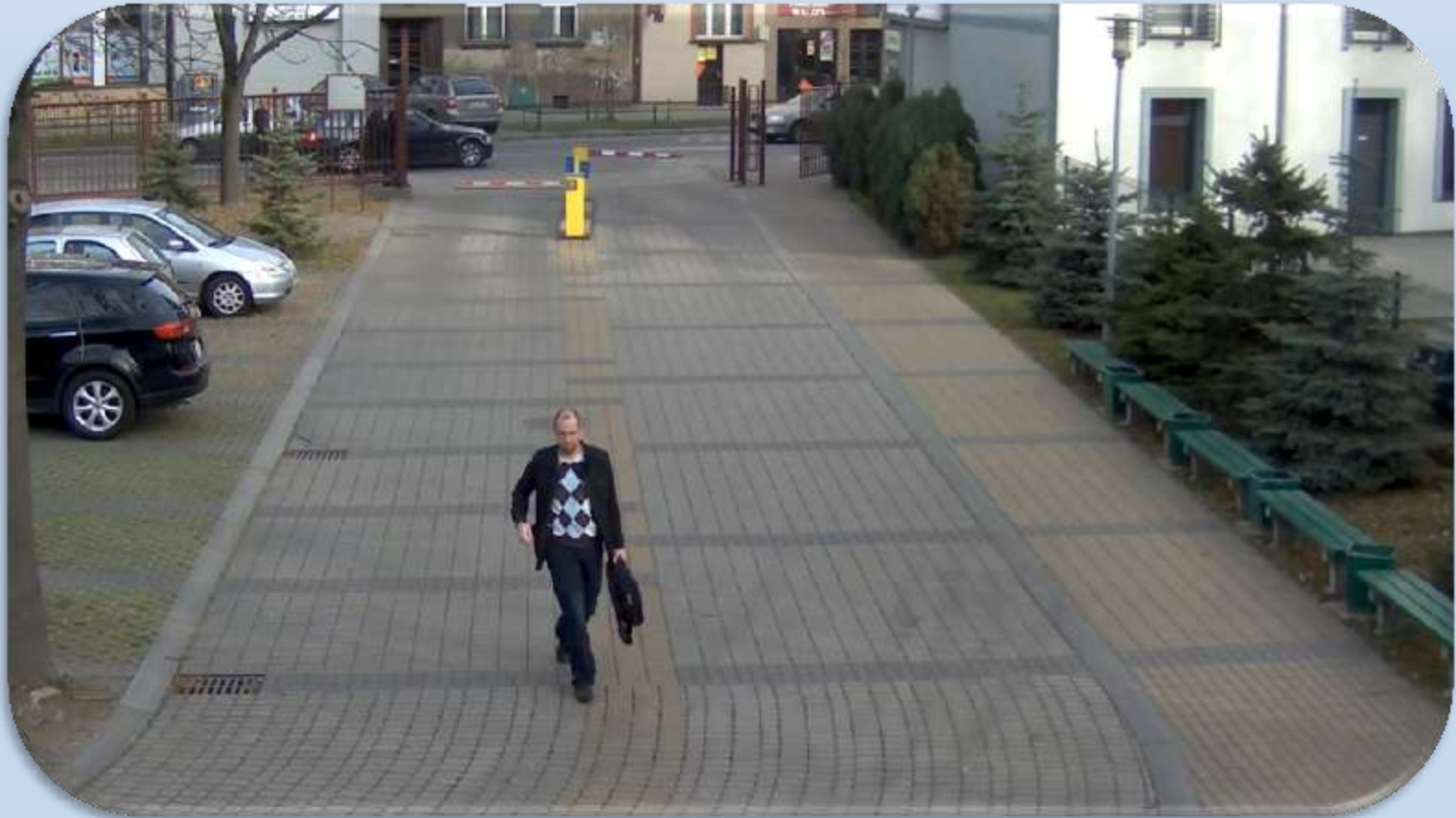
FACE (PERSON) RECOGNITION TESTS



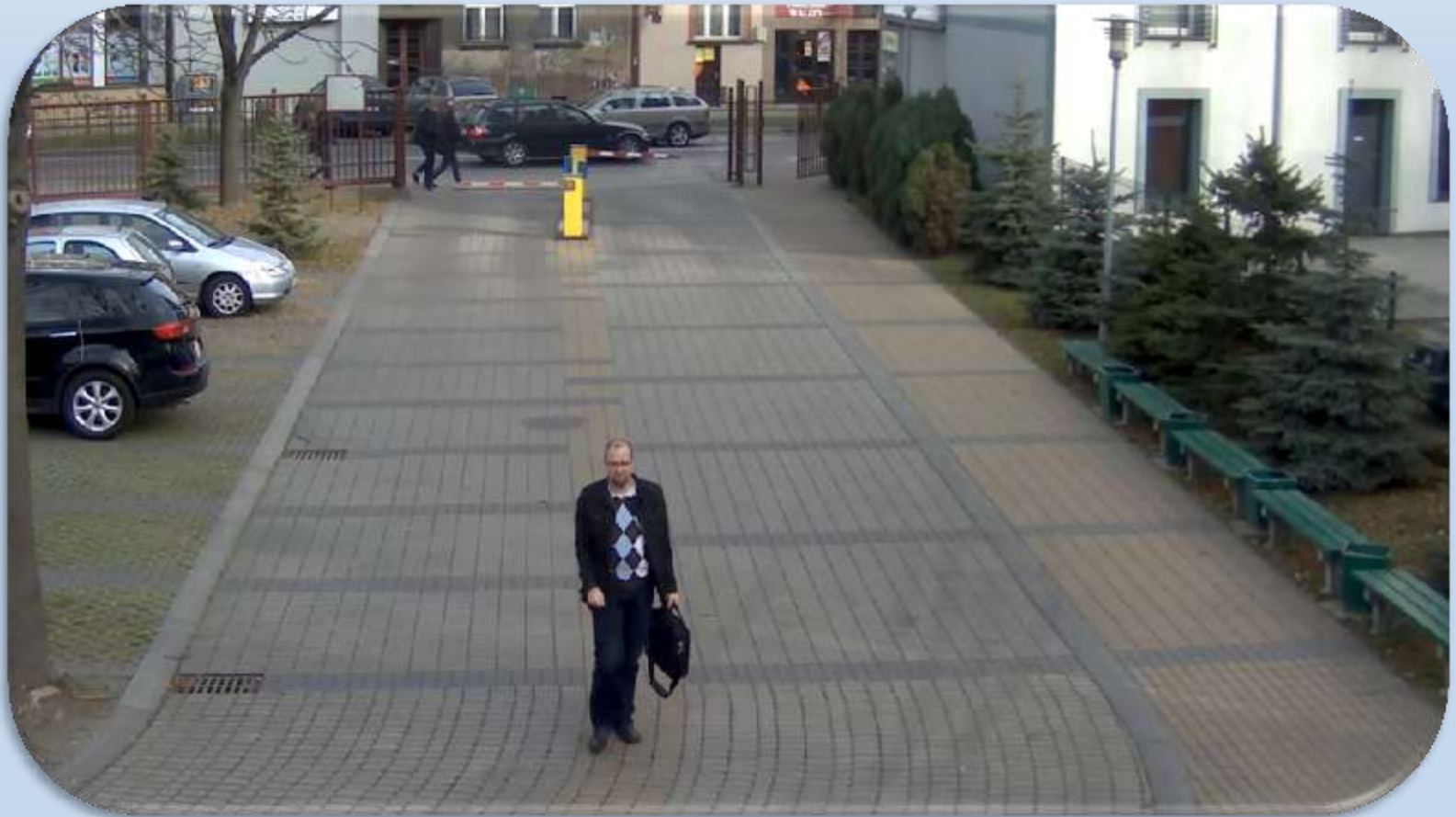
FACE (PERSON) RECOGNITION TESTS



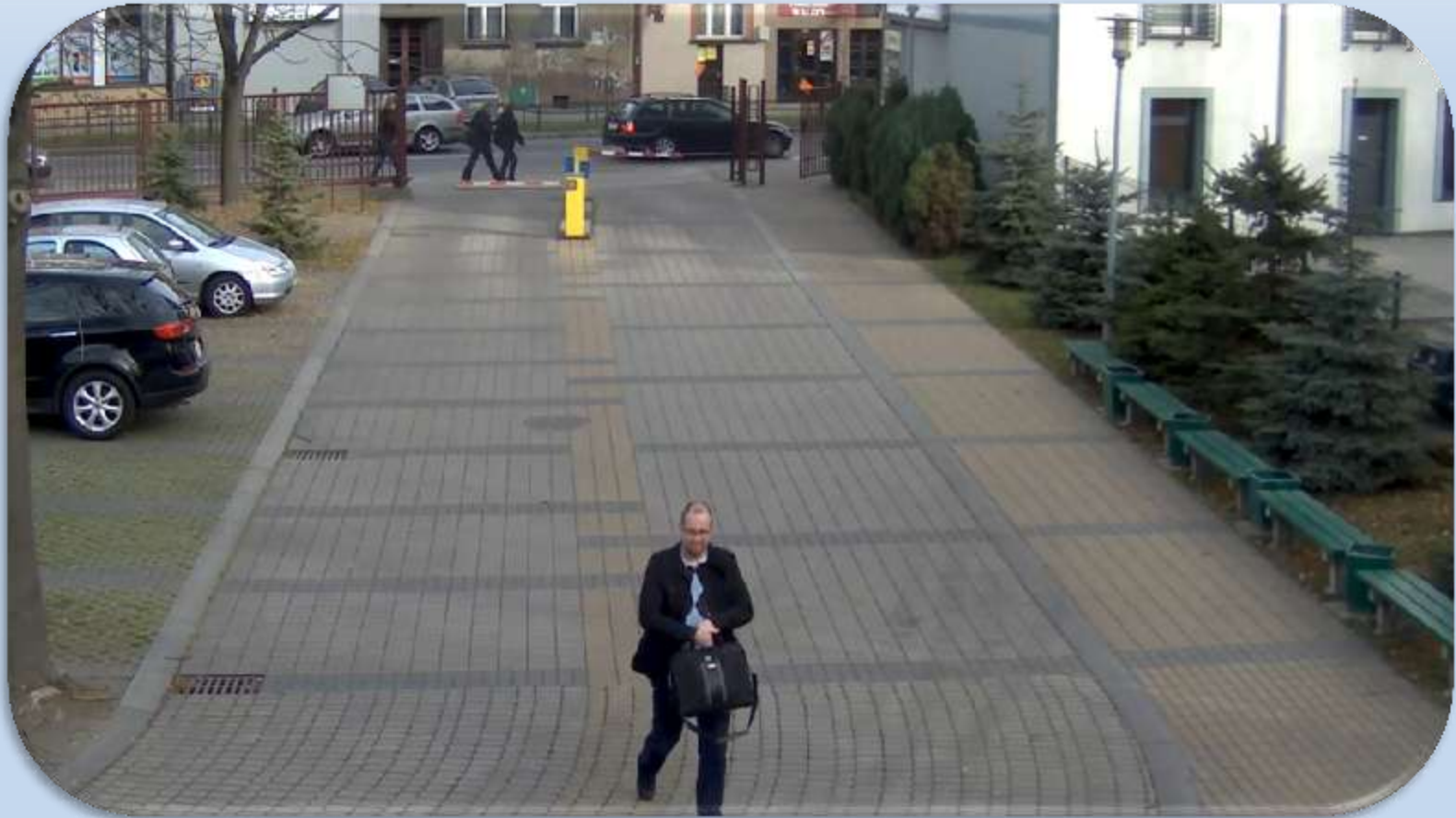
FACE (PERSON) RECOGNITION TESTS



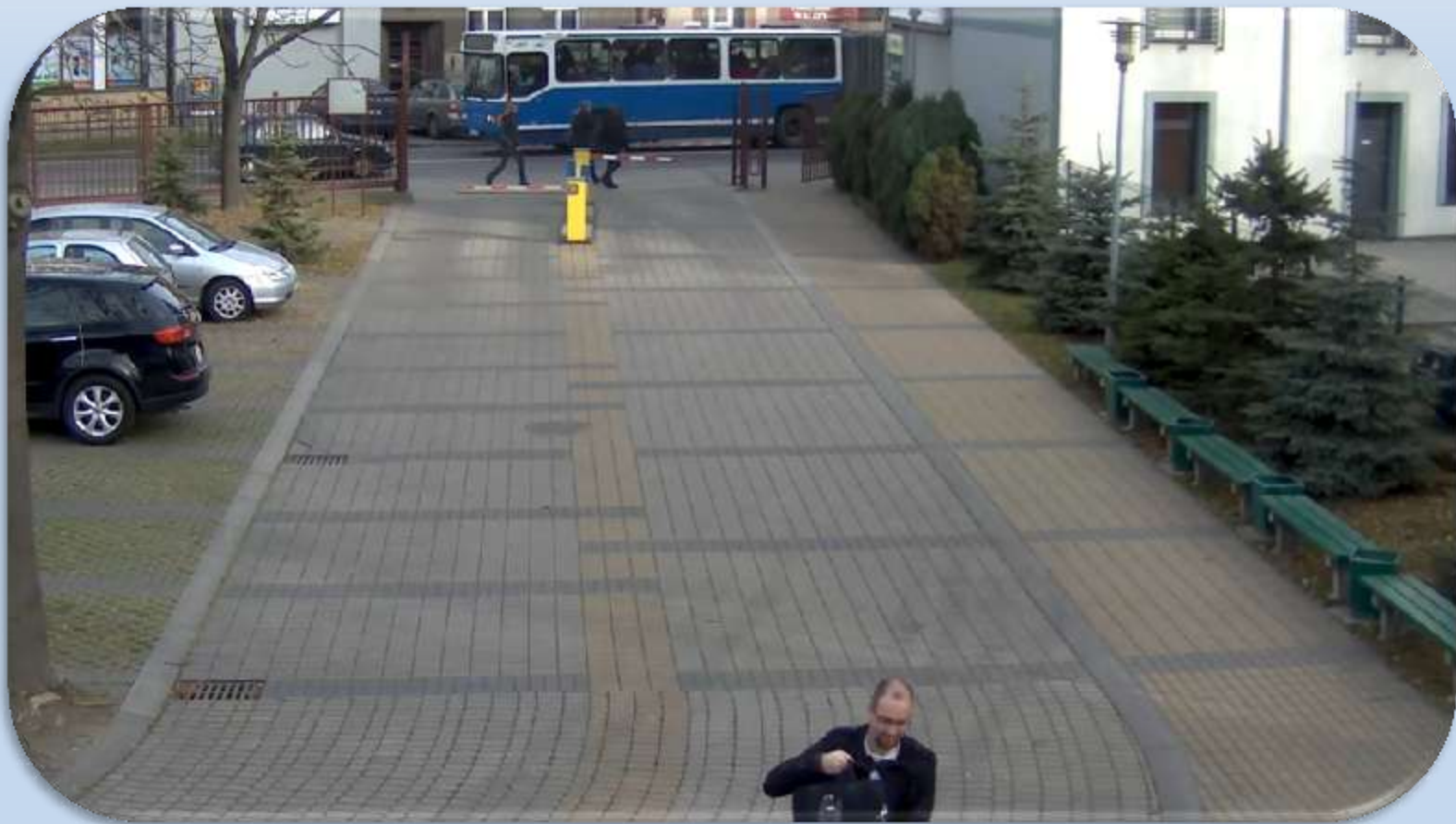
FACE (PERSON) RECOGNITION TESTS



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FACE (PERSON) RECOGNITION TESTS

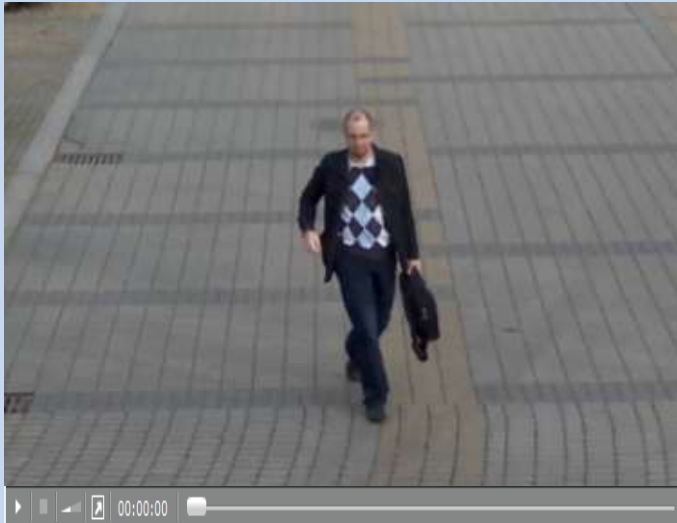


FACE (PERSON) RECOGNITION TESTS



Test methodology (I):

Compare with pattern



Reference images taken in controlled conditions. Video and reference images presented in the same time



Which person is presented on this video?

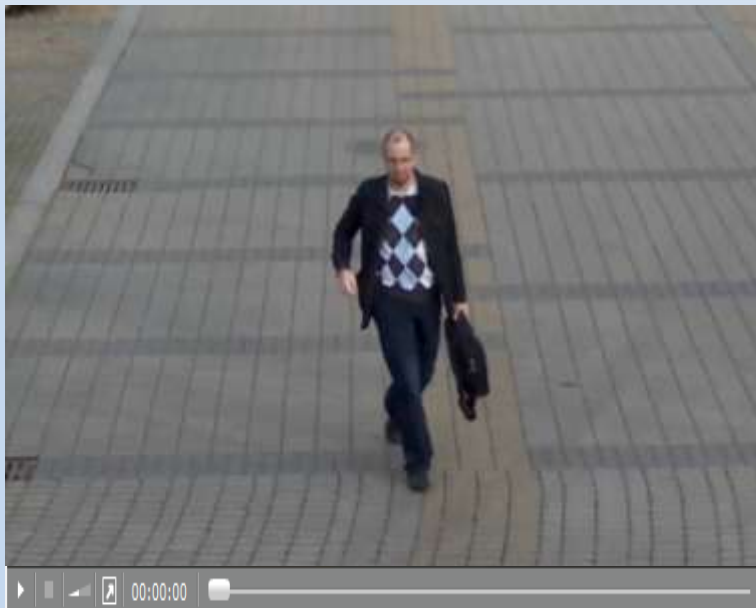


Photo: FRVT 2006 and ICE 2006
Large-Scale Results



Photo: The FERET evaluation methodology
for Face-recognition Algorithms

One image/face in data base



LARGER SET OF REFERENCE IMAGES?

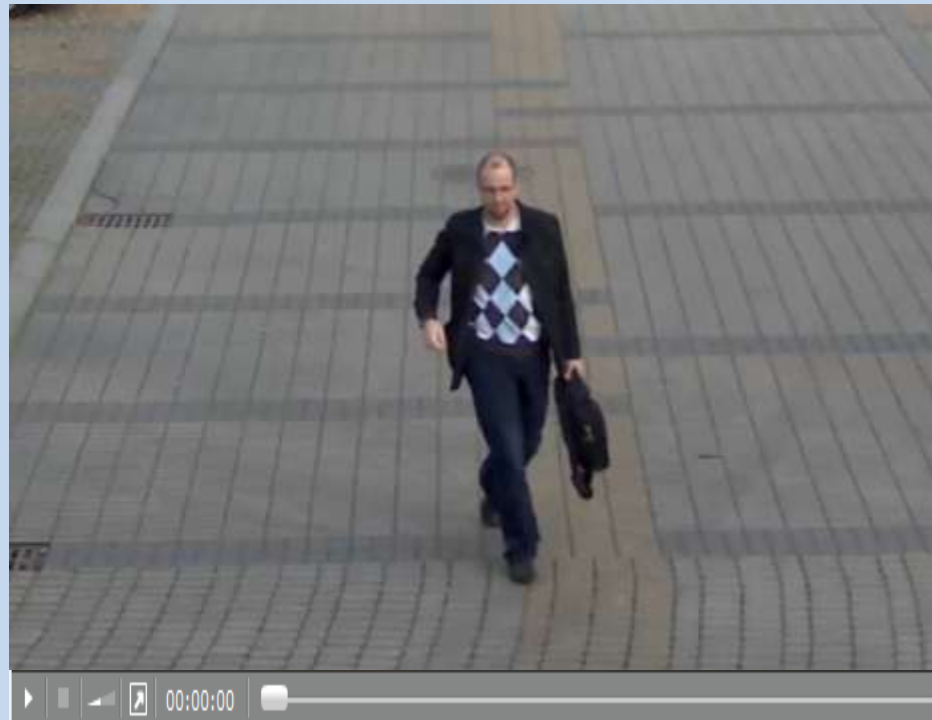
Group of pictures taken in the same way for persons but in different condition each image



Photos: The FERET evaluation methodology for Face-recognition Algorithms, Detecting Faces in Images: A Survey, Three-Dimensional Face Recognition

Test methodology (II):

Memorize face presented on video



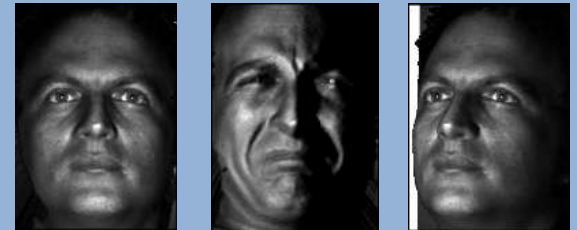
Test methodology (II):

Choose from reference images

Which person was
presented on this video?



3 images/per face in data base

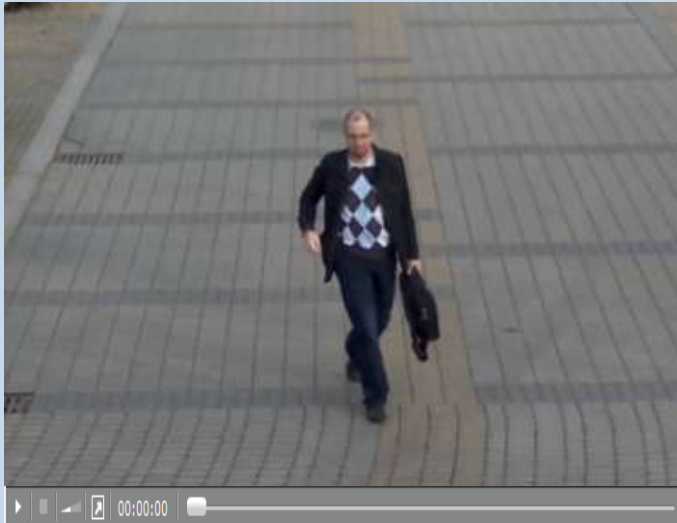


Test methodology (III):

Identify face features



Beard?



Glasses?

Blue eyes?

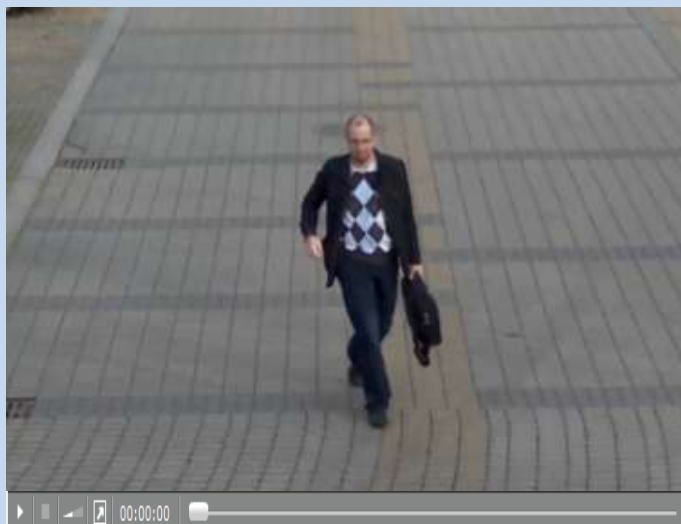
Describe characteristics of
presented person

Oval head shape?

Test methodology:

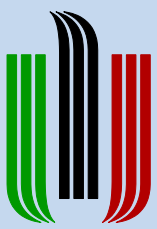


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THANK YOU! ACKNOWLEDGMENT...



The research leading to these results has received funding from the European Community's Seventh Framework Program (FP7/2007-2013) under Grant Agreement n° 218086 (INDECT)

