



Technical University of Lodz

Institute of Electronics

PROPOSAL OF THESIS TOPIC FOR MGR INŻ. (MSE) PROGRAMME IN TELECOMMUNICATIONS AND COMPUTER SCIENCE

Topic: Face recognition using principal component analysis-based approach

Topic in Polish: Rozpoznawanie twarzy z wykorzystaniem metody PCA

Supervisor: Krzysztof Ślot

Auxiliary supervisor:

Goals and scope of the work:

An objective of the dissertation is to implement a face recognition procedure using the so-called 'eigenface' approach. This task involves two steps: derivation of a feature-space, which is convenient for face-image representation, and subsequent classification of samples that exist in the derived space. The first step of the procedure implements Principal Component Analysis (or PCA) method, whereas the second step is realized using nearest-neighbor data-classification approach. An expected outcome of the dissertation is operational face recognition software, written preferably in JAVA or C++.

Prerequisites (e.g. experience in writing programs in a computer language or knowledge of a foreign language):

Programming in JAVA or C++, matrix algebra

Literature:

To be announced.

Lódź, 2009-05-29

Supervisor's signature

THESIS TOPIC SELECTION ACKNOWLEDGMENT

Student's name: _____ Student's ID _____

Faculty: _____

Main subject/major/module: _____

Date and student's signature

Supervisor's signature



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