



## Proposal of thesis topic for mgr inż. (MSE) programme in Telecommunications and Computer Science

**1. Topic:** Recognition of fingerspelling signs

**2. Supervisor:** Paweł Strumillo

**3. Auxiliary supervisor:** -

### **4. Goals and scope of the work:**

Fingerspelling refers to the manual sign language in which each alphabet letter is represented by a unique hand/finger gesture. There is a number of different manual alphabets (e.g., single or double hand) that were developed to aid communication for deaf persons.

The aim of the project is to develop an image processing system for automatic recognition of manual language signs (and/or other gestures used in everyday life while speaking to other people). This task will require application of feature extraction and data classification procedures. The expected outcome of the project is the software that will make the computer understand the sign language, e.g. that can be useful in enhancing recognition performance of natural language.

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

digital signal and image processing methods  
programming in C++ or MATLAB

### **6. Literature**

R.C. Gonzales, P. Wintz, Digital image processing, Addison Wesley, Reading MA, 1987.

Łódź, 2003-03-31

Supervisor's signature

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## THESIS TOPIC SELECTION ACKNOWLEDGMENT

Student's name: \_\_\_\_\_ Student's ID \_\_\_\_\_

Faculty: \_\_\_\_\_

Main subject/major/module: \_\_\_\_\_

Date and student's signature

Supervisor's signature