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

Topic: “3D scene modeller with interactive texture mapping from photos”

Topic in Polish: “Program modelowania scen 3D z interaktywnym mapowaniem tekstur ze zdjęć”

Supervisor: Paweł Pelczyński, PhD

Auxiliary supervisor:

Goals and scope of the work:

The goal of the project is development of 3D scene modeller software. It should be capable of proper texture mapping from a set of real scene photos under the assumption of good digital representation of captured scene. Observed scene should be easily represented with spheres, cylinders, boxes and other simple shapes. It is assumed, that produced scene description will be transferred to Pov-Ray renderer. Camera calibration and multi photo texture fitting may be necessary to obtain good texture mapping.

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

Programming experience in C/C++ or Java.

Literature:

- Vivek Kumar Bhojnagarwala: ”An Introduction to 3D”, http://www.webreference.com/3d/3dintro/
- http://news.povray.org/povray.text.tutorials/

Lódź, 2009-06-01

Thesis Topic Selection Acknowledgment

Student’s name: ___________________________ Student’s ID ____________

Faculty: ____________________________

Main subject/major/module: ____________________________

Date and student’s signature

Supervisor’s signature