REPUBLIC OF MACEDONIA
Ss. Cyril and Methodius University in Skopje
Faculty of Computer Science and Engineering

P.O. Box 393, 1000 Skopje; Tel: 02/30 88 255; www.finki.ukim.mk

Final project proposal

Type	Master
Title	***Multi-agent simulation of pedestrian mobility***
Supervisor	Assistant Prof. DSc. Sonja Gievska
e-mail	sonja.gievska@finki.ukim.mk

Department / Group
Institute of Intelligent Systems

Topic(s)
Muti-agent systems, simulation, urban mobility

Project can start from	15 Nov 2014 – 15 March 2015
Project duration	4 months

Short description
In order to improve the process of urban modeling, and to represent urban dynamics by using a more natural metaphor, we have made efforts to design multi-agent system for studying and exploring urban dynamics. The model representing the complexity of the pedestrian mobility has to incorporate the nature of the modeled phenomenon by accounting the interdependence between human behavior and urban environment. Our efforts are directed towards correlating emergent behavior patterns of different types of pedestrians to contextual knowledge that will help us map realistic pedestrian behavior into agent's decision making capabilities.   The aim of the project is a continuation of our efforts in developing multi-agent systems as a tool for simulation and predictive urban modeling. The University High Performance Grid Computing Center will be available for more efficient parallel processing if needed. The project is part of our research collaboration with the Department of Architecture at the University of Ss. Cyril and Methodius

Results and assessment
A documentation written in a manner of technical report will be needed for completion of the project along with a video of the simulation. The assessment will give special importance to the quality and research contributions of the proposed agent modeling and the discussion and interpretation of the modeling and simulation results.

Other (additional) information
The simulation of our case study can be seen at: http://www.youtube.com/watch?v=ooUjJ3Ilieg&feature=youtu.be