



SEERC 24 Proxenou Koromila Street 54622, Thessaloniki, Greece Tel: +30 2310-253477/8 Fax: +30 2310 234205

www.seerc.org Email: contact@seerc.org

RESEARCH STUDENTS' SEMINAR SERIES

Friday 26 June 2015 11:00 – 12:00

SEERC Conference Room 3rd Floor, Strategakis Bldg

"Investigating the Effects of Emotions and Emotional Contagion on Crowd Evacuation via Multi-Agent System Modelling and Simulation"

By
Ms Marina Ntika
PhD Student
Department of Computer Science
The University of Sheffield

ABSTRACT

Human behaviour during emergency evacuations is strongly influenced by the emotions experienced by the evacuating individuals, which are in turn affected by their personality and the way they perceive their environment. Additionally, a phenomenon known as emotion contagion, which refers to the propagation of emotion, contributes to the overall emotional state of the evacuating person. An initial investigation has been conducted on the steps that should be followed in order to develop a multi-agent based emergency evacuation simulation, which incorporates agent emotions, personality and emotional contagion. Special focus is given on studying the effects of emotional contagion, therefore three theoretical contagion models are formally described and implemented in different evacuation scenarios. The results of the simulations indicate that altering the emotional contagion model leads to different simulation outcomes.

The seminar series is open to all members of *staff* and *students* of CITY and to any *externals* that wish to attend.



