**Call for Tutorial Attendance at ICCMIT2018**

**Tutorial Virtual Reality and Augmented Reality: User-Centered Design and Evaluation Process for Software Application Development**

**Organized by:**

Ass. Prof. Jolanda G. Tromp1, 2, PhD. and Miguel A., Muñoz2, PhD.

1 Department of Computer Science, State University of New York (SUNY) in Oswego, USA

2 Center for Mind, Brain and Behavior Research, University of Granada (CIMCYC-UGR), Spain

E-mail: [jolanda.tromp@oswego.edu](mailto:jolanda.tromp@oswego.edu) / [mamuoz@ugr.es](mailto:mamuoz@ugr.es)

**Objectives and Motivation**

This tutorial takes the participants through a step-by-step overview of the user-centred engineering process for the development of a user-friendly Virtual Reality (VR) and Augmented Reality (AR) setups. It consists of a clear description of each of the elementary acitivities in the process of developing a VR/AR setup. These activities are the ‘critical factors’ for achieving user-friendliness and they are essential to help ensure a VR/AR setup with high quality interactivity, visibility and feedback from system to end-user. This tutorial shows how to manage the development process, with repeatable practical guidance for the project manager, the system developers, the software designers and the user-interface designers. It gives a structure for the entire requirements analysis and requirements specification process, based on an tried and tested development structure, leading to a detailed plan for the design and evaluation of the elements of VR/AR systems, including rapid evaluation methods and the use of biometric data collection methods to assess the user-experience. A successful development process is achieved through applying a systematic framework for the requirements analysis, specification, rapid prototyping and evaluations, planning frequent team meetings, where a shared vision of future product is developed and maintained. This tutorial provides the user-centered engineering framework, development structure and and overview of the design and evalaution methods to effectively create a VR/AR setup.

**Learning Outcomes**

Following completion of this tutorial, participants will exhibit an enhanced awareness of the user-centered engineering process for VR/AR setups. This is an important skill in the rapidly expanding domain of VR/AR development projects. Participants will be able to express comprehensively and logically how the concepts of the user-centered design and evaluation process fit into the engineering process as a whole and they will have learned how to relate it to their present knowledge.

**Who should Attend**

This tutorial will be suitable for, but not limited to, the following VR/AR developer roles:

* VR/AR software development project managers who want to get a rapid project planning tool,
* VR/AR applications developers who want to improve their requirements specification approach,
* VR/AR applications interface designers who want to learn a framework for managing the design process,
* VR/AR applications evaluators who want to plan and run empirical studies of VR/AR applications using Human-Computer Interaction methods and/or Biometric evaluation methods, within the iterative software development framework.
* Anyone interested in developing or researching VR/AR software applications within a structured State-of-the-Art framework.

**Call for Paper Submissions on ICCMIT2018**

<http://www.iccmit.net/>

Please have a look at the conference website for further information about submitting papers. All instructions and templates for submission can be found in the ICCMIT2018 website: http://www.iccmit.net/. The accepted papers will be published in ISI/SCOPUS journals. Also, the best articles will be invited to be published again after expansion as book chapter in IGI Book.

**Important Dates**

Paper abstract submission: February 15, 2018

Notification of acceptance: February 22, 2018

Final paper submission and authors camera ready: March 7, 2018

Conference Dates: April 2-4, 2018