Crowd Simulation and Analysis

Soraia Raupp Musse and Claudio Rosito Jung
Pontifical Catholic University of Rio Grande do Sul and Federal University of Rio Grande do Sul

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Core A (Room 301)

Abstract

In this talk we will present some of our research results in the context of crowd simulation and analysis. First we will discuss our previous and ongoing research on crowd simulation and open problems related to heterogeneous crowds, validation and real case scenarios. Then, we will tackle problems related to video-based scene monitoring, such as camera self-calibration, people tracking, and change detection in crowded scenes.

Bio

Prof. Soraia Raupp Musse earned her PhD in Computer Science from EPFL - Switzerland in 2000 supervised by Prof. Daniel Thalmann. Her research interests include crowd simulation, analysis, facial animation and integration between computer graphics, pattern recognition and computer vision. She is a professor of Computer Science at PUCRS, where she manages research projects funded by private companies (e.g. HP Brazil, ONRG-USA and Petrobras) and supervises postdocs, PhD, Master and undergraduate students. She created and currently coordinates VHLab (Virtual Human Lab) where projects supported by private companies and Brazilian government are developed. She has been a reviewer of journals such as IEEE TVCG and CG&A, and conferences such as SIGGRAPH and Eurographics, she also serves as editorial board of IJC GT International Journal of Computer Games Technology. She is co-author together with Prof. Daniel Thalmann of Crowd Simulation book published by Springer-Verlag in 2007 and re-edited in 2013. Currently, she is doing her sabbatical at UPenn with Prof. Norman Badler.

Claudio Rosito Jung received the B.S. and M.S. degrees in Applied Mathematics, and the Ph.D. degree in Computer Sciences, from Universidade Federal do Rio Grande do Sul (UFRGS), Brazil, in 1993, 1995 and 2002, respectively. He is currently a professor at UFRGS in the Computer Science Department. His research interests include several topics of image processing, computer vision and pattern recognition, such as medical imaging, multiscale
image analysis, vision for intelligent vehicles, object/pedestrian tracking, multimedia applications, multimodal signal processing, stereo/multiview matching and crowd analysis/simulation. He is currently doing his sabbatical with Prof. Norman Badler at UPenn.

Faculty Host: Mubbasir Kapadia