#### **GAME-ON'2002 FINAL PROGRAMME**

O= presentation with Overhead

LCD= presentation with LCD Projector

The underlined authors are usually the presenters, Papers in grey boxes are candidates for the best paper award

Conference Site: University of Westminster, Harrow Campus, Northwick Park London , United Kingdom

#### Thursday, November 28, 2002

16.30 - 17.30 Registration Westminster University

17.30 - 18.30 **Reception** 

#### Friday, November 29, 2002

08.45	-	17.00	Registration	Westminster	University
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09.00 - 09.15 **Welcome** 

**Welcome Address** 

Quasim Mehdi, Wolverhampton University, Wolverhampton, UK Norman Gough, Wolverhampton University, Wolverhampton, UK

09.15 - 10.00 **Session I** 

KEYNOTE SPEAKER

09.15-10.00 Session Chairperson:

Quasim Mehdi, Wolverhampton University, Wolverhampton, UK

**KEYNOTE** 

**Game Engines in Intelligent Virtual Environments Research** 

Marc Cavazza, University of Teesside, United Kingdom

10.00 - 10.30 **Coffee Break** 

10.30 - 12.30 **Session II** 

LEARNING TECHNOLOGIES

10.30-12.30 Session Chairperson:

Norman Gough, Wolverhampton University, Wolverhampton, UK

# GAME-1-O-LCD Learning by Imitation of Behaviors for Autonomous Agents Cédric Buche, Marc Parenthoën and Jacques Tisseau.....89

## Friday, November 29, 2002

	GAME-28-LCD Evolving Improved Opponent Intelligence Pieter Spronck, Ida Sprinkhuizen-Kuyper and Eric Postma94  GAME-30-LCD Temporal Difference Learning and the Neural Movemap Heuristic in the Game of Lines of Action Mark E.M. Winands, Levente Kocsis, Jos W.H.M. Uiterwijk and H. Jaap van den Herik
12.30 - 13.30	Lunch
13.30 - 15.00	Session III
13.30-15.00	Storytelling and Natural Language Processing  Session Chairperson:  Marc Cavazza, University of Teesside, Middlesborough, UK  GAME-13  Investigation into Speech based Interaction for Video Games  Eleni Spyridou and Ian Palmer
	GAME-17 Generation of a 3D Virtual Story Environment Based on Story Description Xin Zeng, Q.H.Mehdi and N.E.Gough

15.00 - 15.30 **Coffee -Tea Break** 

## Friday, November 29, 2002

	AGENTS, BEHAVIOURS, PLANNING AND MOTION
15.30-18.00	Session Chairperson: David Al-Dabass, Nottingham Trent University, Nottingham, UK
	GAME-4
	Generating Dynamic Motions for Articulated Figures
	Stefan M.Gruenvogel
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	The μ-SIC System; A Connectionist Driven Simulation of Socially
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	Brian Mac Namee and Padraig Cunningham129
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	A Physics Based Motion Control Algorithm for Dynamical Game
	Environments
	H.Cheng, T.R.Wan and R. Earnshaw134
	GAME-6-LCD
	Coordinating Agent Movements in a Semi-Concurrent Turn-Based Game of
	Strategy
	Tristan Pannérec
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	Search Based Planning: A Model for Character Behaviour
	Miguel Lozano, Steven Mead, Marc Cavazza
	and Fred Charles144

08.30 - 11.00	Registration Westminster University
08.30 - 10.00	Session V
08.30-10.00	NEURAL NETWORKS AND EVOLUTIONARY SYSTEMS  Session Chairperson: Norman Gough, Wolverhampton University, Wolverhampton, UK
	GAME-12-O-LCD Online Coevolution for Action Games Pedro Demasi and Adriano J. de O. Cruz
	GAME-3-LCD Classifiers System, as 'ANIMAT' Architectures for Action Selection in MMORPG Gabriel Robert, Pierre Portier and Agnès Guillot
	GAME-22 Neural Networks for animating Variations in Character Behaviours Z.Wen, Q.H.Mehdi and N.E.Gough189
10.00 - 10.30 10.30 - 12.30	Coffee-Tea Break Session VI – ROOM A
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10.30-12.30	APPLICATIONS I: FLIGHT AND WARGAME SIMULATIONS  Session Chairperson: to be announced later
	GAME-23 Introducing Emotion into Military Simulation and Video Game Design America's Army: Operations and VIRTE Russell Shilling, Michael Zyda and E. Casey Wardynski151
	GAME-5 Training the Soldier for OOTW Sonia R. von der Lippe and Bradley C. Schricker
	GAME-27 Steps toward Building of a Good AI for Complex Wargame-Type Simulation Games Vincent Corruble, Charles Madeira and Geber Ramalho155

	GAME-26 Recognising Situations in a Flight Simulator Environment Patrick A.M. Ehlert, Quint MMouthaan and Leon J.M. Rothkrantz 165
10.30 - 11.30	Session VII – ROOM B
	EU-GAMENET MEETING
10.30-11.30	Session Chairperson: Norman Gough, University of Wolverhampton, Wolverhampton, UK This meeting is intended to introduce the Gamenet proposal to the wider audience of the conference and to draw reactions from the group and suggestions on how to proceed with this EU initiative.
12.30 - 13.30	Lunch
13.30 - 15.00	Session VIII – ROOM A
	APPLICATIONS II: NETWORK, BOARD, MISCELLANEOUS
13.30-15.00	Session Chairperson: Quasim Mehdi, University of Wolverhampton, Wolverhampton, UK GAME-29-LCD
	Programming a Computer to play and solve Ponnuki Erik van der Werf, Jos Uiterwijk and Jaap van den Herik
	GAME-7-LCD Active Objects to Develop Computer Games for Blind Children Cyrille Bertelle, Antoine Dutot, Damien Olivier and Guillaume Prévot
	GAME-25 A Multimodal Lego Robot Guillaume Barraud, Priam Pierret and Léon Rothkrantz
13.30 - 15.00	Session IX – ROOM B
	RENDERING ALGORITHMS
13.30-15.00	Session Chairperson:  Marc Cayazza University of Teesside Middlesborough UK

	GAME-11-SL Efficient Mip Mapped Texture Compression by Vector Quantisation and Wavelet Decomposition Stephen J. McGlinchey	
	GAME-31 Real-Time Generation of Impact Effects in Virtual Environments with Application to Games Ryan Doyle, Richard Cant and David Al-Dabass	
	GAME-24 A New Realistic Motion Blur Algorithm James Flannery, Richard Cant and David Al-Dabass	
15.00 - 15.30	Coffee-Tea Break	
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18.00 - 18.15 **Closing Session** 

CLOSING SESSION AND BEST PAPER AWARD

18.00-18.15 Session Chairperson:

Norman Gough, Wolverhampton University, Wolverhampton, UK

Philippe Geril

**Closing Announcements** 

#### Sunday, December 1, 2002

Trip on the Thames and visit to the Maritime Museum and Greenwich Observatory

Departure at 10.00 o'clock from Westminster University

#### **KEYNOTE SPEECH**

#### **Game Engines in Intelligent Virtual Environments Research**

Marc Cavazza, University of Teesside

Research in Intelligent Virtual Environments investigates the role of Artificial Intelligence to support behavioural modelling of the environment itself or of virtual agents populating it.

In recent years, the use of game engines in scientific research has gained popularity and some form of academic respectability, when these have been used in various contexts: virtual heritage, intelligent agents, and even immersive Virtual Reality. Game engines provide an ideal development environment for Intelligent Virtual Environment as they support advanced graphic rendering, incorporate real-world physics, and provide many features for the integration of external software.

In this talk, I will illustrate the use of game engines, more specifically the Unreal Tournament<sup>TM</sup> engine, in several research projects in Intelligent Virtual Environments:

- Character-based interactive storytelling
- Interactive problem solving in virtual environments
- Virtual patients based on qualitative simulation
- "Alternative Reality" experiments, exploring alternative laws of physics

These will also illustrate a great diversity of software architectures and programming languages used.

By providing outstanding performance on the graphical side, games engine enable us to concentrate to the specific research topics, while still providing rich experimental settings in which these ideas can be tested.

## **NOTES**

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