Feb 27th 2008, Barcelona, Spain

RAVE-08

First of an Annual Workshop Series

This is the first of a workshop series focusing on the whys and hows of realistic action in virtual environments.
RAVE= Real Action in Virtual Environment

RAVE MANIFESTO

RAVE: Real Action, Virtual Environments. **We are concerned with why and how and under what conditions people act realistically within virtual environments, and how to make it happen.**

http://rave08.peachbit.org

Why do people smile at an avatar that is smiling at them, when they know full well that no one is there, and no one can see their smile? Why do they become anxious when standing in front of a deep virtual hole in the ground, when they know for sure that there is no hole there? Since the advent of virtual reality in the 1980s it has been well known that not only do people have a feeling of being transported to the place depicted by a virtual environment, but they also tend to act as if they were really there.

We are interested in how people act, how they respond, and why. The focus in a particular research may be, for example, on brain imaging during RAVE, and in another it may be on some aspect of motor behaviour, or the distribution of attention, or emotional responses, etc., or any combination of these. We are not interested in studies that rely solely on questionnaires and which might normally fall in the area of communication studies, or broadly within the domain of human-computer interaction.

Our focus is clear: people tend to respond realistically to virtually generated sensory data. We want to measure it objectively and quantitatively to understand how and why it happens scientifically, and what we can do also as engineers to make it even better.

We put no limits a priori on what we regard as a "virtual reality" system - we include in this term augmented reality, single screen-displays, head mounted displays, Cave systems, and so on. However, we do insist that the type of phenomenon referred to above, the RAVE phenomenon, is at the core of what constitutes our domain of interest. And that immersion in digital media at some level is necessary.

This research has profound ramifications across many dimensions:

Science – what is it about the way the brain processes sensory signals that makes it possible for relatively poor simulations of reality to spark such a high degree of realistic activity? How can we use this understanding to take designed better environments? Even the very notion of the human body and our relationship to our own bodies can be transformed. This has very deep implications for the scientific study of body processing and consciousness.

Computer Science and Engineering - How can we build systems that maximise the chance that people will RAVE in them? There

are fundamental challenges for the construction of new systems, and their emergence out of the laboratory into businesses and homes.

Applications - to the extent that people show such realistic responses, whole new fields of endeavour open up that can be approached in novel ways: psychotherapy, neurorehabilitation, quality of life technologies, ergonomics, mission training, industrial prototyping, future urban environments and dwelling, and education to name but a few. When we add the capability for such virtual environments to be shared by many people, we also add a vast range of additional applications, such as remote negotiations and meetings, virtual travel, virtual conferences, and so on.

Philosophy - what are the implications for our notion of reality and self? Is what we have thought of as reality simply one amongst many parallel realities that we now inhabit?

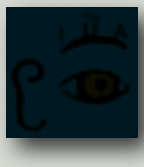
Entertainment - there are profound new possibilities for entertainment - for example, a person could lead multiple parallel lives - working in the office all day answering emails in "this life", a private detective in the other "parallel life" within a shared virtual reality.

We invite contributions to the first RAVE workshop. Contributions must be at a high scientific level, and typically would describe, attempt to understand, or engineer RAVE phenomena. RAVE-08 is only the kick-off one day conference of what we plan as the first of an annual series, so the number of contributions that can be accepted is small.

In addition to scientific papers, the workshop will also present in the form of posters an overview of the four related Integrated Projects now ongoing in the FET program.

Abstracts should be sent to rave08@peachbit.org by Jan 18th 2008 and cover the following points (template available at http://rave08.pechbit.org):

•One or two sentences providing a basic introduction to the issue at stake in the research..
•A clear statement of the problem specifically covered by the study, and the current state of the art.
•A section beginning with "Here we show" giving the main result, explaining what new knowledge has been generated.
•A section explaining what the main result reveals in direct comparison to what was thought to be the case previously, or how the main result adds to previous knowledge.
•A section putting the results into a more general context, and the implications for further research.



What is real?
If you act as it is real, then it is real for you. If digital media are behind the illusion, then it is RAVE.

Logistics

The workshop will be **hosted by the Institute of Audio-Visual Studies (IUA)**, **Universitat Pompeu Fabra**, Barcelona, Spain, with support from **Starlab** (Peach Coordination Action) http://specs.upf.edu

Registration fee: to kick off this series of conferences, we are pleased to offer a free-registration policy for RAVE-08.

More information at:
http://rave08.peachbit.org

Important Dates

•Abstracts due: 2008-01-18 [Closed]
•Responses by: 2008-01-31
•Workshop: 2008-02-27
NB: A total of 27 abstracts have been received. A maximum of 12 will be selected for oral presentation, with other selected for poster presentations.

Workshop Committee

•Mel Slater, ICREA-UPC/CRV
http://www.event-lab.org/
•Paul Verschure, ICREA-UPF/IUA,
http://specs.upf.edu/
•Giulio Ruffini, Starlab
Peach, http://peachbit.org,
Starlab, http://starlab.es
Logistics: Cristina Martin (Starlab) and Anna Mura (SPECS@UPF-IUA)

RAVE-08 in Collaboration with:

- •UPF-IUA (ICREA)
- •UPC-CRV (ICREA)
- •Starlab, Peach
- •FET, EU FP

Preliminary program

08:30 - 09:00	Registration
09:00 - 09:30	Welcome session
09:30 - 10:30	Keynote 1
10:30 - 11:00	Coffee break - Posters
11:00 - 12:40	Presentations
12:40 - 14:00	Lunch Break
14:00 - 15:00	Keynote 2
15:00 - 15:40	Coffee - Posters
15:40 - 17:00	Presentations
17:00 - 18:00	Keynote 3
18:00 - 19:00	Presentations
19:00 - 19:15	Conclusions
19:15 - 20:00	Posters