

VERVE

Context

The work takes place within the European project IP VERVE that lasts for 3 years.

Social exclusion has many causes, but major factors are the fear and apathy that often accompany a disability. The European e-Inclusion policy stresses the importance of ICT in improving the quality of life in potentially disadvantaged groups, including older people and persons with disabilities. In this project, we will develop ICT tools to support the treatment of people who are at risk of social exclusion due to fear and/or apathy associated with a disability. These tools will be in the form of personalised VR scenarios and serious games specifically designed for therapeutic targets and made broadly available via a novel integration of interactive 3D environments directly into Web browsers. We will perform cutting edge research into rendering and simulating personalised and populated VR environment, 3D web graphics, and serious games. These technical efforts will be underpinned by our clinical/laboratory and industry partners, who will be fully involved throughout in the requirements, design and evaluation of VERVE, and liaison with the stakeholders (i.e., participants, carers/family, and health professionals).

Objectives

We will develop virtual humans that can be controlled by manipulating a number of parameters. This will be achieved using a novel hybrid data-driven/procedural approach. The parameters will characterize each individual agent (e.g., its appearance, morphology, emotional behaviour characteristics) as well as groups of agents (e.g., proxemics, group organization). Parameters to be manipulated and adapted to simulate different virtual agents will be based on principles from human psychology and social neuroscience that underlie emotional responses to different types of human behaviours.

The project aims to define and implement two main sets of parameters: 1) high level behaviour parameters such as emotion dimensions for which a link between these parameters and behavioural characteristics will be established; 2) group description (by their shape, size, activity (dialoguing, arguing, etc...)).

Project Length: 1 year post-doc

Place: TELECOM ParisTech, Paris

Stipend: depends on applicant qualification (around 2400 euros)

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