New framework for 3D tele-immersive social networking

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It's Friday night, you're exhausted after a long week in the office. You're not going to leave the house so you could either watch TV or spend a few hours catching up on your social networks. But how about doing both? Thanks to the EU REVERIE (Real and Virtual Engagement in Realistic Immersive Environments) project, you will soon be able to immerse yourself into a 3D online environment which lets you interact with friends and share common experiences together, in real time.

While the success of social networks has been proven beyond all doubt - with more and more interactions taking place online - such interactions are still a poor substitute for the real world. Users now want an online environment which allows safe and enjoyable collaborative interaction, bringing together realistic inter-personal communication with 3D media creation. The equipment is already available in our living rooms: 3D TV, Microsoft Kinect or the Nintendo Wii are progressively replacing the traditional mouse/keyboard experience. These devices are social media-enabled, and all they miss is a range of content creation tools able to bridge the physical/digital divide, making communication in social networks more reflective of how people interact in the real world. The possibilities are endless - taking your class on a trip to a realistic virtual model of the European parliament; taking part in competitions to build 3D reconstructed models; or participating in interactive and entertaining role playing games while inviting your friends to join through existing social networking channels.

The REVERIE project fosters a joint learning and development process

between institutions in Italy, UK, Belgium, Switzerland, Germany, Netherlands, Ireland, France and Greece to meet the demanding research challenges related to the development of ethically-sound technologies for online human interaction. REVERIE integrates cutting-edge technologies related to areas as diverse as 3D data acquisition and processing, spatial sound processing, autonomous avatars, networking, real-time stereoscopic rendering, physical interaction and emotional engagement in virtual worlds. These features are combined into two scenarios which provide the basis for technical integration and demonstrate the validity and potential socio-economic benefits of REVERIE's vision for the future of social networking— immersive social networks and natural interaction in an immersive environment.

REVERIE is unique in that it takes into account what the end user really wants from collaborative and online human interaction. Lifelike naturalistic and real-time representations of the user are supported to enable natural communication and emotional interaction in a virtual environment. Collaborative gaming is facilitated and made realistic to foster both educational and entertainment outcomes. Interactive services are responsive and can be adapted to individual users as well as groups of users. Moreover, integration with social networking allows friends to communicate in a new way by exploring exciting and educational locations and hanging out together in a virtual world. REVERIE proposes all this while being committed to considering the impact of its technologies on end users from a social, legal and ethical point of view.

The project was granted EU-funding to the tune of EUR 7.5 million. It is due for completion in February 2015.

More information: www.reveriefp7.eu/project/