PROJECT FACTSHEET

TARGET

Customizable and low cost training for Security Critical Agents using augmented reality technologies

INSPIRATION

Security Critical Agents (SCA), such as policemen, firefighters or civil security agencies need to be trained to manage a range of events including: terrorism, biohazard attacks and public disorder. Developing realistic training scenarios is a time consuming task, involving many people and potential problems. As a result there is a need to find a more flexible and a cost-effective alternative. Augmented and mixed reality technologies which allow for the simultaneous merging of real and virtual worlds help to overcome some of these problems and also to provide highly realistic training environments. The TARGET project specifically addresses these aspects while also allowing training organizations to create their own customized scenarios more quickly, at lower cost and potentially involving fewer people.

INNOVATION

The mission of TARGET is to develop, trial and assess a comprehensive open distributed pan-European Platform for serious gaming leveraging state-of-the-art decision support tools, for the training and competence assessment of Security Critical Agents (SCAs). The tools developed within the project will be focused on two levels: augmented and mixed reality for operatives on the ground and police command centres. LIST will utilize its expertise in augmented reality, human-computer interaction, computer graphics, sensor technologies, data analytics and distributed systems to provide the technology required to deliver the training experiences.

LIST takes a leading role in working with the training organizations in order to identify their technical, scenario and usability requirements so as to deliver a high quality platform. This has in turn led to innovative research into mixed reality interaction paradigms that are designed to support natural and fluid interaction under high stress environments.

Six main training scenarios to be implemented in the platform will be developed in close cooperation with end-users. As technical co-ordinator LIST plays the key role in developing and integrating technologies developed internally and by other project partners.

IMPACT

The project has a number of key impacts:

- Advanced training environments that are easy to customize at a low-cost
- Support a wide range of interaction approaches including virtual reality, augmented reality and incident command centres, which will be applicable in this domain and in other fields.
- Advanced sensor technologies for use within mixed reality and other environments
- An improved understanding of how to effectively design mixed reality training environment
- Simulation and assessment systems which allow for realistic and measurable scenarios.

Partners

ARTTIC (FR) , ATRISc (FR) , Cleveland Fire Brigade (UK) , French National Police College (FR) , Estonian Academy of Security Sciences (EE) , Fachhochschule der Polizei des Landes Brandenburg (DE) , Fraunhofer Institute for Transportation and Infrastructure Systems (DE) , German Police University (DE) , Inconnect (NL) , Institute for Public Security of Catalonia (SP) , International Security Competence Centre G.m.b.H. (AT) , International Security and Emergency Management Institute (SK) , Ministerio del Interior Guardia Civil (SP) , University of Luxembourg (LU) , Ecole Normale Supérieure - ENS (FR)

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