# 46. A serious game for training social skills of police officers

e have developed a serious game called LOITER to train the social skills of police officers. Players of the game have to resolve a conflict with a group of loitering juveniles. Through playing this game, police trainees can improve their social awareness.

Players interact with virtual juveniles in a 3D-environment using a full-body immersive virtual reality system. The virtual juveniles use artificial intelligence to respond to the player according to theories from social psychology. Thus, the



98

choices of the players in how to reason with the juveniles determine the outcome of the conflict.

## ICT science question

One of our main challenges is to model human behaviour and let virtual characters respond believably to human users. To create such a model, we analyzed interactions between police officers and civilians. We also implemented an interactive story structure that lets people experience the influence of their own behaviour on others. This results in different scenarios with different story endings.

Our approach is unique because of its combination of methodologies and the ability of the characters to explain the reasoning behind their actions.

# **Application**

We have developed LOITER in cooperation with the research centre for serious gaming T-Xchange, software developer re-lion, and the former national police services agency KLPD.

Existing products that focus on training of social skills for police officers are practically non-existent

or offer only very limited interactivity. Using our implemented techniques, this training can be made more effective, because trainees can directly see the results of their actions and learn why the interaction played out as it did.

### **Alternative Application**

Serious gaming has a broad impact. Our approach can be used for similar serious games for other professions that would benefit from social skills training, such as social workers and health care professionals. Using our approach to serious games, the training programs for these professions can be made more effective. The technical framework underlying our game enables easy editing and creation of both scenarios and characters.

Other commercial partners could be companies specialized in assessment and human resource development.

### Nice to know

Currently, only a fraction of police trainees can practice their social skills with professional actors. Most of their knowledge is gained by accompanying more experienced officers.

The loitering juveniles in our serious game lend their names from the Dutch tv series "New Kids".



This serious game lets police officers improve their social awareness through training with intelligent virtual characters so that they are better at handling conflicts in a deescalating way



This serious game uses a virtual reality setup to assist in social skills training by letting trainees gain first-hand experience in how their choices may affect others.



This serious game combines social and computer science to improve people's social awareness and paves the way for the creation of other scenarios for social skills training.



This serious game uses artificial intelligence informed by theories from social psychology to guide the behaviour of virtual characters so that players can improve their social awareness.



Jeroen Linssen j.m.linssen@utwente.nl hmi.ewi.utwente.nl/IUALL/demos/loiter/

COMMIT/ project
VIEWW Virtual worlds for well-being

UNIVERSITY OF TWENTE.





