Thesis Project Form

Title (tentative):   Analyzing the acceptance of interaction with avatars in immersive Virtual Reality with social gaze cues

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Description

Motivation and application domain

). In the field of human-robot interaction, several studies address the problem of acceptance of robot personal space invasion, also taking into consideration social cues, like eye movements, and gaze changes. Understanding the role of social cues implemented on avatar is important to achieve a natural human-computer interaction in immersive Virtual Reality.

General objectives and main activities

) The main goal of this thesis is to investigate and to develop behaviors that will encourage the human user to collaborate and interact with an avatar in immersive Virtual Reality. In the literature, it is well known that the use of facial cues is a very effective modality of both perceiving the internal state of the other and affect the actions of the other. In this thesis, students should investigate the effect of eye gaze, also combined with a proximity behavior, and of the timing of actions performed by the avatars in Virtual Reality environments.

Training Objectives (technical/analytical tools, experimental methodologies)

1)To analyze the state of the art in the field of human robot interaction
2)To build a Virtual Reality environment with avatars implementing various forms of social behaviors
3)To perform experimental sessions in order to investigate the behavior of humans interacting with avatars.
4)To compare the results with existing human-robot interaction approaches.

Place(s) where the thesis work will be carried out: DIBRIS â€" Valletta Puggia Via Dodecaneso 35

Additional information

Maximum number of students: 2