

An augmented reality intervention aiming at exercise awareness

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1 Abstract

Augmented reality (AR) is a recent field of R&D being the development efforts still focused in its adoption for everyday consumer use. Recent market studies (*AugmentedReality.org*) claim that shipments of smart-glasses will hit 1 billion around 2020, surpassing shipments of mobile phones by 2025.

AR is generally experienced through gaming, creating immersive gaming experiences in the user's surroundings (one of the best known examples is Pokemon Go, allowing users to catch virtual monsters who are hidden in a real world map). The range of capabilities and dependence generated by these technologies provide a unique relationship with its users. This suggests that AR-enhanced games have the potential to influence behaviour and possibly modify it in order to obtain a better quality of life.

In this research project we sustain that the awareness of the costs and benefits of a complete physical exercise work-plan as well as a conscious adhesion to such a plan (quite the opposite to what happens in Pokemon Go) is essential to obtain good and last longing results.

The ongoing challenge is to develop an AR experience that motivates sedentary people to perform physical exercise in a lusory attitude as well as producing safe training programs for its practice.

2 Objectives and Tasks

- T1** Review of the related literature
- T2** Selection of the hardware for the prototype
- T3** Development of a casual game using AR
- T4** Development of a gesture recognition module
- T5** To select the test samples and experimental set-up
- T6** To implement, test and deploy the application
- T7** To write up a MSc thesis and a scientific paper

3 Timetable

T1 1 month

T2 0.5 month

T3 1 month

T4 1.5 months

T5 1 month

T6 2 months

T7 2 months

4 Expected Results

- 1 journal paper
- 1 MSc thesis

5 References

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