Dynamic spatial positioning system based on sounds and augmented reality for visually impaired people

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ABSTRACT

This paper presents an application which intends to exercise spatial association of a three dimensional stimulus with its corresponding motor feedback, inspired on the Ping Pong Game. The application uses a low cost and easily built artifact, enhanced with an augmented reality layer provided by a free authoring tool. The augmented reality resources empower the artifact with sound feedback, so visually impaired people can use it. Besides, the visual feedback can be useful for non-visually impaired people and also for therapists, who can prepare exercises, promoting a therapeutic application and involving social inclusion capabilities.

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