

IS1 A physical to virtual control system implementing an art-based game.

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We hereby present *Tiler*, an art-based game where a virtual world made of tiles and controlled through a set of electronic cubes where players can/should gather the decoration of a floor based on aesthetical criteria. Such a tool allows projecting and designing bi-dimensional shapes by physically manipulating tri-dimensional objects. Besides that, *Tiler*, is an application that brings to life a clear example on how we can achieve new ways of interfacing the physical world with virtual ones. In the following article we introduce the logical and technical aspects of this real-to-virtual interface and show its potential applications in different fields.

