







Dia Panto

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DualPanto is a new haptic device that lets blind users interact continuously with a changing virtual world rather than being restricted to relying only on audio cues. For blind users, continuous interaction means they can have more enjoyable play experiences with first-person shooting games and sport games.

DualPanto is built out of two haptic pantographs connected to handles. Users operate the *me* handle with one hand and hold the *it* handle with the other. The *me* handle represents the user, while the it handle represents something else, like an enemy. Encoders track the rotation and position of each handle so that motors can calculate the precise location of the avatar in the virtual world.

Interesting fact: DualPanto is named after a 2D haptic device called a pantograph, which has mechanical linkages that are connected based on the shape of a parallelogram.



