

Robot Floor Tiles Move Beneath Your Feet

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The Robot Tiles provide an infinite walkway that might have applications in virtual reality. Credit: Hiroo Iwata.

(PhysOrg.com) -- In a stroke of odd creativity, Japanese researchers have created robotic blocks that automatically detect where you're walking and position themselves in front of you before you take your next step. As a system, the blocks create an infinite walking surface, acting somewhat like moving stones as you cross an invisible creek.

Hiroo Iwata, a professor at the University of Tsukuba, created the Robot Tiles. Each robot tile is covered with Kuralon EC, a touch-sensitive conductive fabric that detects pressure from the user's feet in order to predict the position of their next step. Ultrasonic sensors transmit the position and orientation of each tile back to a central computer that instructs the tiles where to go next.

As the video [in Japanese] shows, users have to walk pretty slowly across the tiles in order to give them enough time to get into position. Although these [Robot](#) Tiles don't seem to have any obvious applications, Iwata hopes they could be useful for creating an infinite walking surface for [virtual reality](#) applications.

via: [Technabob.com](#)

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