"I Did It My Way": Moving Away from the Tyranny of Turn-by-Turn Pedestrian Navigation

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ABSTRACT

In this article we describe a novel approach to pedestrian navigation using bearing-based haptic feedback. People are guided in the general direction of their destination via vibration, but additional exploratory navigation is stimulated by varying feedback based on the potential for taking alternative routes. We describe two mobile prototypes that were created to examine the possible benefits of the approach. The successful use of this exploratory navigation method is demonstrated in a realistic field trial, and we discuss the results and interesting participant behaviours that were recorded.

Keywords
Mobile, navigation, vibrotactile, GPS.

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