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(57) Abstract :

The present invention is a hand wearable haptic feedback based navigation device for distance sensing which has the flexibility of attachment and detachment of the navigation sensors and has the flexibility of sensing the distance of the obstacle in multiple directions covering maximum 180 degrees in the direction of pointing of the hand. The device measures the distance of obstacle using sensors at the tip of a finger. The measurement is broken down into categories on the basis of distance. This category is eventually informed to the user via haptic feedback actuators strategically located on the specific finger. The feedback is taken to three dimensions by mapping the hand's spacial orientations using Inertial measurement units.

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