

Pedestrian Navigation on Mobile Devices

Pedestrians find navigation devices difficult to use because these devices assume rigid mounting in vehicles traveling on roads. For pedestrians, aligning the displayed map with the world can be frustrating.



Which way is north? Now, where is north on this map?

Solution: Inertial sensors built into the device can overcome this alignment challenge

- 3D accelerometers, gyros, and magnetometers sense gravity, rotation, and the earth's magnetic field to resolve the device's pose
- Maps like Google Earth™ can stay oriented to the device's true heading and level to the ground



Demonstration:
Pedestrian
Navigation using
inertial sensing

