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**Abstract**

Augmented Reality Based Indoor Navigation introduces to the concept of navigation system for smartphones capable of guiding users accurately to their destinations in an unfamiliar indoor environment. Digitally enhanced guides have many advantages over traditional paper-based indoor guides. Global Positioning Systems (GPS) facilitates outdoor navigation through the best routes possible. However, it fails to work indoors due to signal attenuation by infrastructural surfaces and other obstructions.

Integrating the proposed system with augmented reality enhances and enriches the user experience by combining real and computer-based scenes and images to deliver a unified but enhanced view of the world. Image comparison techniques are applied to get features that will be useful in classifying and recognition of images captured by the user. It helps achieve accuracy by relative location detection of user’s current location and comparing to landmark images saved in the database.

It will work on devices like smartphones, tablets based on Android which will guide the users accurately to their unknown destination, the services are not restricted to any specific industry the fields of this application are limitless.

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