



MIMOS Indoor Location Platform (Mi-ILP)

Localisation, navigation and tracking services are gaining importance due to society's increase in mobility. Similar capabilities are often not feasible indoors as GPS signals are highly susceptible to physical obstructions. MIMOS Mi-ILP enables human-centric indoor navigation that mimics an outdoor GPS system through a software development platform that leverages on existing WiFi or Bluetooth technology.

Overview

MIMOS Indoor Location Platform (Mi-ILP) enables personalised indoor positioning services similar to a GPS device in environments where the GPS signal is not available or is unreliable. The platform comprises software libraries that allow indoor navigation applications to be developed. A mobile device, using WiFi or Bluetooth signals to sense the surrounding environment, can then determine its real-time location and display the suggested navigational route. A "location fingerprinting" analysis identifies unique signals from a variety of sources to accurately pinpoint a location.

Features

Mi-ILP comprises the following features:

- **Real-Time Precision Indoor Positioning**

A position can be accurately displayed and updated in real time with the associated room, area and floor within a building.

- **Location Acquisition Using Existing Infrastructure**

Without installing additional infrastructure in a building, location signals are acquired from existing WiFi or Bluetooth beacons as well as sensor information from the mobile device itself.

- **Off-the-Shelf User Device Support**

The Mi-ILP app can be quickly installed on commercial mobile devices and be used instantly.

- **Simplified Location Management**

Simplified location profile creation and maintenance functions allow indoor maps to be organically added while managing the users in the system.

Technology Benefits

The main impacts of Mi-ILP are:

- **Enables Indoor Navigation and Tracking**

Users can now navigate, and persons and objects of interest can now be tracked in an indoor environment.

- **Enables Innovative Location-Based Applications**

The platform allows the development of innovative location-based applications such as location-based push advertisements, emergency services and friend/object finder.

- **Low Deployment Barrier**

Mi-ILP's compatibility with existing building infrastructure and off-the-shelf mobile devices with only simple mapping and calibration required lowers down costs and makes deployment easy.

- **Ease of Setup and Maintenance**

Mi-ILP provides easy and flexible creation and maintenance of location profiles and fast indoor location system setup and deployment.

Technology Summary

Mi-ILP

A software development platform that enables personalised indoor location services.

Industries: Retail, Public, Healthcare, Tourism, Enterprise, Government

Features

- Real-time precision indoor positioning
- Location acquisition using existing infrastructure
- Off-the-shelf user device support
- Simplified location management

Technology Benefits

- Enables indoor navigation and tracking
- Enables innovative location-based applications
- Low deployment barrier
- Ease of setup and maintenance



MIMOS Mi-ILP sample location-based applications

System Requirements

Mi-ILP	
Hardware (Minimum)	
Processor	Dual-Core 2.3GHz
Memory	1GB of RAM
Storage	8GB
Software (Minimum)	
Operating System	Android 4.3 (iOS planned for future release)

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