

# MIMOS Indoor Location Navigation and Tracking System (Mi-Tuju)

The use of GPS systems for navigation and tracking paves the way for indoor navigation which is fast gaining popularity. The challenge comes in the lack or absence of GPS signals when indoors. There is also a need to track indoor visitors and locations to analyse ongoing events for safety and commercial purposes. MIMOS Mi-Tuju provides a system for real-time indoor navigation, awareness and communication for both users and building operators.

### **Overview**

MIMOS Indoor Location Navigation and Tracking System (Mi-Tuju) provides indoor maps and location information for easy indoor navigation. For building operators, it tracks indoor visitors and provides visitor information. In the absence or lack of GPS signals indoors, Mi-Tuju leverages on WiFi signals to detect and track locations in real time. Mi-Tuju is developed on an indoor location platform, Mi-ILP, and consists of a Mi-Tuju app that allows indoor navigation and a central web dashboard, Mi-MIST, for building operators.

#### **Features**

Mi-Tuju provides the following features:

### Indoor Location Positioning and Navigation

Accurately display a position in real time and navigate to locations of interest such as retail shops, ATM machines or facilities such as restrooms, lifts and fire exits.

#### Nearby Person Identification and Panic Beacon

Users who have the Mi-Tuju app can be immediately located and identified, and in an emergency, the app can send a panic beacon to the building operator.

### ■ Multi-Indoor Site Support

Site maps of multiple buildings/indoor sites are stored on the cloud and users can easily switch site maps on the app.

### Indoor Traffic Visualisation

A widget-based dashboard with heatmap properties enables tracking of indoor traffic locations, visualisation and analysis.

### User Privacy Protection

Location analytics anonymise user data to protect the privacy of its users.

### **Technology Benefits**

The main impacts of Mi-Tuju are:

## Seamless Indoor Navigation

With the Mi-Tuju app, visitors to malls and public service departments can easily pinpoint where they are indoors, know what is around and how to get there.

### Access Control of Public/Private Places

Visitors to malls and public service departments can be easily guided to locations of interest while keeping certain areas private.

### Assisted Traffic/Event Management

For system administrators, a dashboard enables real-time user location visualisation for easy traffic and event management.

### **■ Expandable Multi-Site Platform**

Mi-Tuju's site map library can be expanded and customised for different locations through the Mi-Tuju app.



MIMOS Mi-Tuju indoor traffic visualisation (web dashboard)

### **Technology Summary**

### Mi-Tuju

An innovative system that enables real-time indoor navigation, awareness and communication.

Industries: Retail, Healthcare, Tourism, Enterprise, Government

#### Features

Mi-Tuju provides easy indoor navigation and analysis through:

- Indoor location positioning and navigation
- Nearby person identification and panic beacon
- Multi-indoor site support
- Indoor traffic visualisation
- User privacy protection

#### **Technology Benefits**

Seamless indoor navigation

- Access control of public/private places
- Assisted traffic/event managementExpandable multi-site platform
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MIMOS Mi-Tuju indoor location and navigation (mobile app)

# **System Requirements**

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Mi-Tuju (App)	
Minimum Requirements	
Operating System (OS)	Android 4.3 (iOS planned for future release)
Mi-Tuju (Server)	
Minimum Requirements	
Hardware	Dual-Core 2.3GHz, 16GB RAM, 500GB HDD
os	Ubuntu Server 14.04 LTS
Mi-MIST (Dashboard)	
Minimum Requirements	
Hardware	2GHz or faster Intel <sup>®</sup> Core <sup>™</sup> i5 equivalent, 4GB RAM, 500GB HDD
OS/Browser	Ubuntu Server 14.04 LTS, Google Chrome™ 45 or above



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