

Pixels-based Indoor Map Matching Methodology and System (NYP ID: 0484)

Technology

Indoor localization technology

Type of IP and status

Patent. Singapore Application No. 10201902082Y.

Overview

Outdoor localization based on global positioning system (GPS) had been widely available in commercial product but not indoor localization. This is because the localization engine that is commercially available, requires indoor ICT infrastructure for it to function.

The novelty of this invention is to create a pixels-based indoor map matching methodology and system that enables accuracy of indoor localization to be in sub-metre level. The method makes use of indoor building structure to define allowable and non-allowable pixels to guide localization engine to achieve accurate positioning.

Potential Applications

- Indoor mapping applications
- Indoor services such as autonomous shopping cart

Advantages

- High accuracy and low maintenance
- Minimal infrastructure required

Technology & Licensing Enquiries

Ms Diana Sutanto

Tel: +65 6550 0344

Email: diana_sutanto@nyp.edu.sg

Mr Joel Tan

Tel: +65 6550 0146

Email: joel_tan@nyp.edu.sg

Mr Johnathan Lim

Tel: +65 6550 1972

Email: johnathan_lim@nyp.edu.sg