Method and System for Multi-Layer Positioning System
(NYP ID: 0400)

Technology
A multi-layer positioning system that optimizes all available location estimates statistically and predicts the next possible location of moving objects.

Type of IP and status
Patent. Countries – Singapore and USA.
Singapore Application No. 10201400810V.

Overview
The accuracy and robustness of existing positioning systems are affected by the change of operating environments and application scenarios. Some advanced algorithms, though support multiple techniques, are typically just switching from one default positioning system to another available positioning system. These techniques provide some assurance in robustness in tracking the object position when object moves, but is still unable to improve the accuracy of its position.

Our novel method unifies all available localisation techniques to improve robustness and accuracy in providing the location. It provides a single platform that is able to optimize all available location estimates statistically from various techniques to predict the next possible position of a moving object based on statistical model that adapts to the change of operating environments, constraints and application scenarios through the use of a software-defined adaptive multi-layer module.
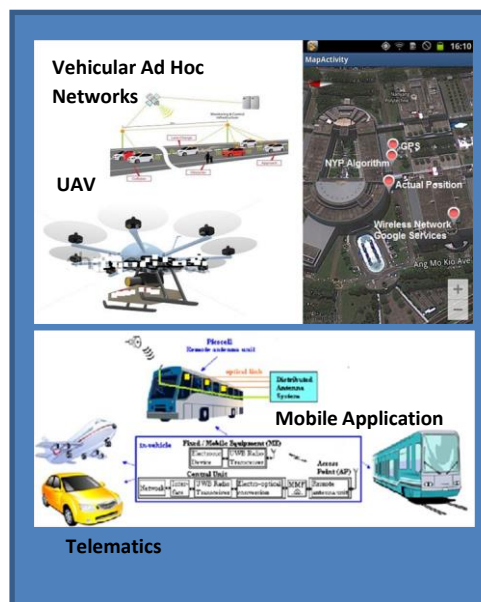
Potential Applications
Localisation of objects, sensors, smart devices, human, *etc.* for location-based solutions in areas such as wireless sensor networks, vehicular networks, defence, Internet of Things, and any other commercial mobile applications.

Advantages
Highly accurate and robust positioning system that predicts next positions of moving objects.

Technology & Licensing Enquiries

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