Abstract

Now-a-days the difficult to tracking the mobile devices has become an issue. Various needs are arising for finding out ways of tracking mobile devices. In this research paper included different algorithm for location tracking. The activity of tracking includes learning and inference, sensing. Different algorithms have different mechanisms based on which the tracking is made possible. For tracking a device in nearby place efforts required are less than from far-away places. Algorithms include their own mechanisms for tracking the devices easily. Some of the algorithms are simple in nature while others are complex. The cost incurred for tracking devices differs when used via wireless against wired networks. Wireless technology is beneficial for tracking the devices in close areas easily. Wire-less technology such as WI-FI becomes very helpful in such cases. For tracking devices in indoor places the system named WITS (Wireless Indoor Tracking System) is used. WLAN based location tracking algorithms is categorized into two types: deterministic and probabilistic. In this paper algorithm such as Bayesian algorithm, nearest neighbor algorithm, History-based tracking algorithm, H. M. M. (Hidden Markov model), RADAR etc. is explained. The use of wireless 802. 11 frameworks is done to locate the devices. Moreover the WI-FI technology can also be used in forest area for tracking animals. WI-FI signals are much useful in places where the wired connections are not possible to set up. Despite of the use of WI-FI signals in location tracking, they are also used in tracking Bar Code...
stickers. Some of the WI-FI based techniques are only software based so it decreases the cost of hardware maintenance. Radio-frequency based tracking in WLAN signals has gained more and more popularity in recent years. In early days the WLAN was used to track only static devices but later on by making advances in the technology it was possible to track the moving devices as well.

References

- Tracking system in Proceedings of IEEE Infocom.
- E. Foxlin2, "Pedestrian Tracking with Shoe-Mounted Inertial Sensors.
- A. Carlotto, M. Parodi, C. Bonamico, F. Lavagetto, M. Valla Proximity classification for mobile devices using Wi-Fi environment similarity.
- R. Zhou, Wireless Indoor Tracking System (WITS), Communication systems/Computing Centre, University of Freiburg
Index Terms

- Computer Science
- Wireless

Keywords

- WI-FI Location tracking
- Bayesian algorithm
- Wireless LAN
- Wireless Indoor Tracking System (WITIS)
- Hidden Markov Model (HMM)