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| **Abstract:** |  |
| Indoor localization technology is real-time tracking of any device or person in an indoor area via a control device. In this paper, the fingerprinting method is utilized to track mobile devices in a specific indoor area. Fingerprinting, also known as pattern matching or database correlation method (DCM), needs a powerful received signal strength indication (RSSI) database which helps to make signal strength maps as well as used for matching. The nearest point of the mobile device is specified by the Kth nearest neighbor algorithm (KNN). Real-time received signals are matched with predefined array of received signal strength indication (RSSI) for different locations to get the actual postion of the device or person. Experimental results show that the average localization error is less than 1 m which is better than many conventional approaches where error is higher. | |