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## RSS based localization techniques for Zigbee wireless sensor network

(Conference Paper)

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### Abstract

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Wireless Sensor Networks (WSN) are implemented in wide range of applications and one of these important applications is the localization and real-time tracking. The accuracy, cost, and power consumption are the most parameter for any proposed technique. Localization in indoor environment is more challenging than outdoor one, since the known Global Positioning System (GPS) is not working probably in indoor environment. In this paper a fingerprinting method for indoor localization is proposed. Real measurements were conducted using IRIS Zigbee motes in indoor environment. Three different configurations are tested where the measurements are conducted at 0, 1 and 1.6 m height. The three dimensional scenarios in the case of 1 m height show more accurate results than two dimensional one. © 2014 IEEE.

### Author keywords

Fingerprinting Indoor localization Wireless sensor networks Zigbee

### Indexed keywords

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