Guidelines for Student Reports

FLOOR FOR ACTIVE LOCALIZATION SYSTEM

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Abstract

Electromagnetic simulators are very used nowadays as powerful tools in order to investigate the e.m. filed propagation when the scenario to be tested cannot be directly analysed in the real world. These software tools are also used for preliminary radiation analysis, which may be validated after through real experimental tests. The activity proposed is focused on the modelling of a real building floor, in order to investigate the radiation of WiFi access point signal, to be used or active localization systems.

Reference Bibliography: Localization [1]-[4].

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- [2] F. Viani, P. Rocca, G. Oliveri, D. Trinchero, and A. Massa, "Localization, tracking and imaging of targets in wireless sensor network: An invited review," Radio Science, vol. 46, 2011.
- [3] F. Viani, L. Lizzi, P. Rocca, M. Benedetti, M. Donelli, and A. Massa, "Object tracking through RSSI measurements in wireless sensor networks," Electronics Letters, vol. 44, no. 10, pp. 653-654, 2008.
- [4] F. Viani, P. Rocca, G. Oliveri, and A. Massa, "Electromagnetic tracking of transceiver-free targets in wireless networked environments," 6th European Conference on Antennas Propag. (EuCAP 2011), Rome, Italy, pp. 3808-3811, Apr. 11-15, 2011 (Invited paper).

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