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Harvesting WiFi Received Signal Strength Indicator (RSSI) for Control/Automation System in SOHO Indoor Environment with ESP8266 (Conference Paper)

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Abstract

WiFi are easily available almost everywhere nowadays. Due to this, there is increasing interest in harnessing this technology for purposes other than communication. Therefore, this research was carried out with the main idea of using WiFi in developing an efficient, low cost control system for small office home office (SOHO) indoor environment. The main objective of the research is to develop a proof of concept that WiFi received signal strength indicator (RSSI) can be harnessed and used to develop a control system. The control system basically will help to save energy in an intelligent manner with a very minimum cost for the controller circuit. There are two main parts in the development of the system. First is extracting the RSSI monitoring feed information and analyzing it for designing the control system. The second is the development of the controller circuit for real environment. The simple yet inexpensive controller was tested in an indoor environment and results showed successful operation of the circuit developed. © 2016 IEEE.

Indexed keywords

Engineering controlled terms: Control systems; Wireless local area networks (WLAN)

Indoor environment; Low costs; Minimum cost; Proof of concept; Real environments; Save energy; Small office home offices; Wifi received signal strengths

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References (8)

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1 Habaebi, H.M., Ali, M.M., Hassan, M.M., Shoib, M.S., Zahrudin, A.A., Kamarulzaman, A.A., Wan, A.W.S., (...), Islam, R.
Development of physical intrusion detection system using Wi-Fi / ZigBee RF signals
2015 IEEE International Symposium on Robotics and Intelligent Sensors (IRIS 2015)
18-20 October 2015, Langkawi Malaysia

2 Habaebi, M.H., Ali, M.M., Hassan, M.M., Shoib, M.S., Zahrudin, A.A., Kamarulzaman, A.A., Azhan, W.S.W., (...), Islam, M.R.
Development of Physical Intrusion Detection System Using Wi-Fi / ZigBee RF Signals
Procedia Computer Science, 76, pp. 547-552. Cited 2 times.
http://www.sciencedirect.com/science/journal/18770509
doi: 10.1016/j.procs.2015.12.342
View at Publisher

3 Habaebi, M.H., Agel, M.M., Zyoud, A.