An Expansion Cluster Routing Algorithm based on RSSI for An Efficient Data Transmission

Sung-IL Hong, Chi-Ho Lin

School of Computer, Semyung University, Jecheon-city Chung-buk Republic of Korea

megadriver@hanmail.net, ich410@semyung.ac.kr

***Abstract*— in this paper, we are propose the RSSI cluster routing method for multi-hop data transmission. The proposed the RSSI cluster routing method be generate the cluster a random to between nodes of similar positions using the RSSI of each node to the sink node in the cluster-based wireless sensor network. And it is to the data transmission to the sink node to the multi-hop through header decision. In this paper, efficiency test results of proposed RSSI cluster routing method was reduced energy consumption when increase the size and traffic in the sensors network by compared with LEACH protocol.**

***Keyword*—Cluster, Routing, Multi-hop, Forwarding, RSSI, LEACH, DDACM**

First A. Author: Sung-Il, Hong, The doctor's course completion, school of computer, semyung university, 65 Semyung-ro, Jecheon, Chungbuk, 390-711 Korea

March 2007 ~ August 2009: The education masters of Semyung University Graduate
August 2009 ~ August 2015: The doctor's course completion at department of computer information, semyung university graduate (Computer science majors)
Interest of areas: SoC CAD, CAD Algorithm, Embedded, Development of Courseware, Multimedia, Lighting Control System

Third Author: Chi-Ho, Lin, The professor, School of Computer, Semyung University, 65 Semyung-ro, Jecheon, Chungbuk, 390-711 Korea

August 1985: Bachelor of engineering, electronic engineering , an engineering collegeof Hanyang University Graduate
August 1987: Eengineering master's degree of Hanyang University Graduate(CAD major)
August 1996: Doctor of Engineering, of Hanyang University Graduate(CAD major)
August 1992 ~ Current: Professor, School of Computer, Semyung University
Interest of areas: SoC CAD, ASIC Design, CAD Algorithm, SOC Design, RTOS & Embedded System, Lighting Control System