

- [2] N. K. Suryadevara and S. C. Mukhopadhyay, "Wireless [14] G. Song, Z. Wei, W. Zhang, and A. Song, "A hybrid sensor network based home monitoring system for wellness determination of elderly," *IEEE Sensors J.*, vol. 12, no. 6, pp. 1965–1972, Jun. 2012.
- [3] P. Cheong, K.-F. Chang, Y.-H. Lai, S.-K. Ho, I.-K. Sou, and K.-W. Tam, "A zigbee-based wireless sensor network node for ultraviolet detection of flame," *IEEE Trans. Ind. Electron.*, vol. 58, no. 11, pp. 5271–5277, Nov. 2011.
- [4] D. S. Ghataoura, J. E. Mitchell, and G. E. Matich, "Networking and application interface technology for wireless sensor network surveillance and monitoring," *IEEE Commun. Mag.*, vol. 49, no. 10, pp. 90–97, Oct. 2011.
- [5] F. Benzi, N. Anglani, E. Bassi, and L. Frosini, "Electricity smart meters interfacing the households," *IEEE Trans. Ind. Electron.*, vol. 58, no. 10, pp. 4487–4494, Oct. 2011.
- [10] J. Mistic and V. B. Mistic, "Bridge performance in a TECHNOLOGY, Coimbatore, Tamil Nadu, India. The research multitier wireless network for healthcare monitoring," *IEEE interest includes Electronics and Embedded System Design. Wireless Commun.*, vol. 17, no. 1, pp. 90–95, Feb. 2010.
- [11] K. Gill, S. H. Yang, F. Yao, and X. Lu, "A zigbee-based home automation system," *IEEE Trans. Consumer Electron.*, vol. 55, no. 2, pp. 422–430, May 2009.
- [12] M. S. Pan, L. W. Yeh, Y. A. Chen, Y. H. Lin, and Y. C. Tseng, "A WSN based intelligent light control system Considering user activities and profiles," *IEEE Sensors J.*, vol. 8, no. 10, pp. 1710–1721, Oct. 2008.
- [13] C. Suh and Y. B. Ko, "Design and implementation of intelligent home control systems based on active sensor networks," *IEEE Trans. Consumer Electron.*, vol. 54, no. 3, pp. 1177–1184, Aug. 2008.
- [14] G. Song, Z. Wei, W. Zhang, and A. Song, "A hybrid sensor network system for home monitoring applications," *IEEE Trans. Consumer Electron.*, vol. 53, no. 4, pp. 1434–1439, Nov. 2007.
- [15] ZigBee alliance examining Japan's new smart home recommendations (accessed on 8 Aug. 2012) [Online] Available: <http://www.smartmeters.com/the-news/3449-zigbee-alliance>
- [16] W. Huiyong, W. Jingyang, and H. Min, "Building a smart home system with WSN and service robot," in *Proc. 5th Int. Conf. Measuring Technol. Mechatronics Autom.*, Hong Kong, China, 2013, pp. 353–356.
- [17] L. Li, H. Xiaoguang, H. Jian, and H. Ketai, "Design of new architecture of AMR system in Smart Grid," in *Proc. 6th IEEE Conf. Ind. Electron. Appl.*, 2011, pp. 2025–2029.
- [18] V. N. Kamat, "Enabling an electrical revolution using smart apparent energy meters & tariffs," in *Proc. Annu. IEEE India Conf.*, 2011, pp. 1–4.
- [19] I. Kunold, M. Kuller, J. Bauer, and N. Karaoglan, "A system concept of an energy information system in flats using wireless technologies and smart metering devices," in *Proc. IEEE 6th Int. Conf. Intell. Data Acquisition Adv. Comput. Syst.*, 2011, pp. 812–816.
- [6] M. Erol-Kantarci and H. T. Mouftah, "Wireless sensor networks for cost efficient residential energy management in the smart grid," *IEEE Trans. Smart Grid*, vol. 2, no. 2, pp. 314–325, Jun. 2011.
- [7] K. D. Nguyen, I. M. Chen, Z. Luo, S. H. Yeo, and H. B. L. Duh, "A wearable sensing system for tracking and monitoring of functional arm movement," *IEEE /ASME Trans. Mechatronics*, vol. 16, no. 2, pp. 213–220, Apr. 2011.
- [8] J. Han, C. S. Choi, and I. Lee, "More efficient home energy management system based on zigbee communication and infrared remote controls," *IEEE Trans. Consumer Electron.*, vol. 57, no. 1, pp. 85–89, Feb. 2011.
- [9] D. Man Han and J. Hyun Lim, "Smart home energy management system using IEEE 802.15.4 and zigbee," *IEEE Trans. Consumer Electron.*, vol. 56, no. 3, pp. 1403–1410, Aug. 2010.
- [20] E. Andrey and J. Morelli, "Design of a smart meter techno-economic model for electric utilities in Ontario," in *Proc. IEEE- Electric Power Energy Conf.*, 2010.

Author Profile

Ramalakshmi R did her bachelor of engineering in Electrical and Electronics Engineering at FRANCIS XAVIER Engineering College, Tirunelveli and doing Master of Engineering in Embedded System Technologies in SRI Shakthi Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India. The research interest includes Electronics and Embedded System Design.