

ABSTRACT

The increased interest of industry and the research community in wireless networking technology has led to many recent advances in wireless LANs and PANs, and has also fueled research in new domains such as sensor networks. Much of the early work on sensor networks explored military applications and associated challenges. The use of sensor networks in commercial and residential applications such as building and industrial automation or security systems has recently gained increased interest.

Many of these applications strongly demand for independent operation from batteries or other local power sources. Hence, the success of these applications will strongly depend on further advances in technology in order to meet power and cost constraints. This talk discusses the challenges and tradeoffs involved in the design of both the overall system as well as the network protocol for real-world applications that desire longevity and reliability.

Biography:

Lakshmi Venkatraman completed masters in Computer Science from University of Cincinnati in 2001. Her masters thesis was in the area: secure routing for wireless ad hoc networks. In 2001, she joined the Research and Technology Center of the Robert Bosch Corp., Palo Alto, CA. Since then, she has worked on scalable Bluetooth networks and is actively involved in research and development in the field of wireless sensors networks.