Abstract

Wireless sensor networks are composed of a large number of sensor nodes with limited energy resources. Energy efficiency is a key design issue that needs to be enhanced in order to improve the life span of the entire network.

In RETT-gen, we transform the expected lifetime of each sensor node to an equivalent temperature, and then by using the heat dissipation equations, we find the hottest path for ending data to the base station, which will not always be the shortest path.

**Index Terms**

Computer Science  
Wireless Sensor Networks

**Key words**

Routing protocol  
energy efficient

Wireless sensor network