

## **Energy conservation in Wireless Sensor Networks**

### **Problem:**

A Wireless Sensor Network is a wireless network that consists of spatially distributed devices called sensor nodes. Each node monitors physical or environmental conditions and communicate with nearby nodes via radio broadcast (network). These sensor nodes are miniature devices and operate on a tiny, non-replaceable battery. Energy is the scarcest resource of wireless sensor network nodes which determines their lifetime. The lifetime of a sensor node can be maximized by minimizing the energy consumption. Hence, energy conservation in wireless sensor nodes has posed a big problem and limits the applications and deployment of wireless sensor networks.

### **Motivation:**

The wireless sensor networks are widely used in Military applications, industrial and civilian applications. The major design challenge is to increase operational life time of sensors as much as possible. Energy efficiency is therefore a critical design constraint. The questions how a wireless sensor network's lifetime can be increased and what are the constraints in improving the operational efficiency are motivating.

### **Reason for submitting paper:**

I feel a presentation can't be as detailed as the paper. In the 10 min time, we would not get a chance to explain everything we researched on. Only an overview can be given. As my research contains more technical details and a clear explanation is required. So, I feel submitting a paper better suit to my topic than presentation.

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