Abstract

Nowadays, WSN based systems have progressively become an important technological advancement. Sensor networks are key in various aspects of life, such as home and industrial automation and health and environmental monitoring. In order to build a sensor based network relevant to a particular application environment, it is important for one to be aware of the current technological developments, as well as available options and techniques in order to make sound decisions. This paper discusses the main building blocks and factors to consider during design decisions of WSN for water monitoring. The paper focuses on the technology alternatives on the WSN subsystems, which are sensing, communication, and storage and processing subsystems. The technological options that are available on each of the subsystems are carefully analyzed and evaluated with regard to the water monitoring application environment. Furthermore, the factors that are important for the development and sustainability of sensor network systems – costs and power sources management are also discussed.


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Index Terms

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