Reliable and Energy Optimized Routing Algorithm for WSNs

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Abstract

Benefits like elimination of hard-wiring, cost reduction, infrastructure-free and easy maintenance make Wireless Sensor Networks (WSNs) an innovative technology whose range of applications is increasing in many different environments. Since WSNs were born, reliable communications have been a challenge. Some complex routing solutions have been presented in the recent past. In this paper, the objective is to present a simple algorithm to enhance the reliability of end-to-end transmissions optimizing power consumption and to demonstrate that it works in applications that require bounded delay guarantees on packet delivery.