

Research and simulation of quality assessment algorithms in wireless sensor networks using Cooja software

Nguyen Trong Sang

Abstract: In the increasingly widespread application of Wireless Sensor Networks (WSNs) across various fields, this study focuses on analyzing and simulating Quality of Service (QoS) evaluation algorithms to improve system performance and reliability. The objective is to develop a theoretical model combined with experiments on the Cooja software to assess the effectiveness of these methods. The expected results will make a significant contribution to the design and deployment of advanced wireless sensor networks, meeting quality of service requirements in real-world environments.

Keywords: wireless sensor stream, QoS, Cooja simulation, sensor grid system, quality assessment