عنوان مقاله:

Prediction - Based Protocol, Clustering Algorithm andRecovery Mechanism for Target Tracking in WirelessSensor (Networks (WSNs

محل انتشار:

مجله بین المللی پیشرفت در علوم کامپیوتر, دوره 3, شماره 3 (سال: 1393)

تعداد صفحات اصل مقاله: 9

نویسندگان:

Shabnam Shoaee - *Faculty of Computer and Information Technology Engineering, Qazvin Branch, Islamic Azad University Qazvin, Iran*

Abolfazl Toroghi Haghighat - *Faculty of Computer and Information Technology Engineering, Qazvin Branch, Islamic Azad University Qazvin, Iran*

خلاصه مقاله:

Target tracking is one of the most important and complicated applications of wireless sensor networks. In this application, temporal and spatial information of mobile object is continuously investigated at particular times. Energy saving is one of the main challenges in target tracking sensor networks. In this paper, we present a Clustering, Prediction-Based Protocol, recovery mechanism with virtual grid and the base station as a fundamental element for target tracking in wirelesssensor networks. Hence, we introduce an efficient protocol namely (PEBSOTT). In this algorithm we use two parameters, distance from predicted location and remaining energy of nodes, for selection sensor nodes for tracking. Also, usingvirtual grid reduces time of decision which causes to the object retaining and faster recovering. For evaluation, we compare the proposed protocol with the PES and EBSOTT algorithms. The simulation results represented desirable performance of the presented protocol.

کلمات کلیدی:

Clustering; Prediction; Recovery; Target tracking; Virtual grid; Wireless sensor network

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/280804