The performance evaluation of target tracking with mobile sensors within interference-limited wirele

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ABSTRACT

An algorithm by combining sensor scheduling with energy efficient for tracking the maneuvering targets with mobile sensor deployed in WSNs (wireless sensor networks) is proposed and investigated in the thesis. In order to minimize the estimated error, the sensor sequence and the optimal sensor movement are scheduled previously and determined first. Moreover, due to the targets is varying with time the EKF (extended Kalman filtering) technique is applied to predict MSE (mean square error) of the predicted targets. Finally, simulation by using of the scenario with two maneuvering targets tracking held to validate the accuracy of the proposed algorithm.

Keywords: wireless sensor networks, extended Kalman filtering, mean square error, maneuvering targets

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