عنوان مقاله:

Design of Modified Extended Kalman Filter Using Artificial Intelligence Method to Improve the State Estimation of Induction Motor

محل انتشار:

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خلاصه مقاله:

In this paper, a MODIFIED EKF(MEKF) method is proposed that improves the EKF's previous methods. In the EKF previous methods usually, the measurement noise covariance matrix (R) is assumed to be persistent and calculated by trial-and-error methods, but various environmental factors such as sensor faults are efficient on the value of R, so we have to update R. In this method we use a genetic algorithm to update R to get accurate estimates. Simulation results show the effectiveness of the proposed method

کلمات کلیدی:

induction motor - state estimation - control method without speed sensor - parameter estimation -Extended Kalman filter-genetic algorithm