Trust based Evaluation System using Signal Noise Detection for MANET and Noise Reduction by Comparative Analysis between Alpha Beta Filter and Kalman Filter

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Abstract

Security and trust are two inevitable concept for secure MANET. There are various systems used for ensuring security and trust in case of MANET. These systems has several advantages as well as several disadvantages in terms high communication and computation overhead. In this proposed trust based system, trust is evaluated on the basis of detection of signal noise and after that reduction of noise as much as possible with the help of Alpha Beta Filter as well as Kalman filter once the signal is flowing from one node to another node. In this paper, it is also able to show that using Kalman filter is more advantageous than alpha beta filter for reducing the error due to noise.

References

11. Welch, G and Bishop, “An Introduction to the Kalman Filter.”

**Index Terms**

Computer Science  
Signal Processing

**Keywords**

Alpha Beta Filter, MANET, Kalman Filter, Security, signal Noise, Trust