Abstract

Spectrum sensing is the main feature of cognitive radio technology. Spectrum sensing gives an idea of detecting the presence of the primary users in a licensed spectrum. The dynamic threshold energy detection is proposed in this paper for the spectrum sensing of Cognitive Radio. The proposed dynamic energy scheme depends on the current state of the primary user. Depending on this, dynamic thresholds are evaluated considering the effect of noise uncertainty. The thresholds evaluated are used to increase the value of $P_d$ and decrease the value of $P_f$.

References

Dynamic Threshold Energy Detection Technique for Cognitive Radio


Index Terms

Computer Science

Information Sciences

Keywords

Spectrum sensing, Energy detection, Probability of detection (Pd), Probability of false alarm (false alarm)