Abstract

Sensing of channel for detecting the presence of primary user and here use the Energy Detection and cyclostationary Techniques in Cognitive Radio the behaviors of this distribution Schemes in Cognitive Radio is mainly depends upon three parameters like Probability of Detection, Probability of False detection and Probability of Miss detection. If there is any vacant space in the channel then it must be provided to secondary users. In this paper inverse chi square with N degree of freedom has been used for the detection of presence of primary
users. SCF algorithm and MIMO channel algorithm has been used for Cyclostationary and Energy detection respectively. And it has been analyzed that the cyclostationary detection technique is best for sensing and the best outcome has been found out at -23. db SNR, further by using the different channels in the media it has been found out that the Rayleigh Channel is best among the three channels being used, which gives the minimum value of false detection.

References

- FCC. Notice of proposed rulemaking and order. ET Docket No. 03-322, December 2003.
Analysis of Energy Detection & Cyclostationary Techniques for the Utilization of Spectrum in Cognitive Radios

- C. R. C. M. da Silva, B. Choi, and K. Kim, B Distributed spectrum sensing for cognitive radio systems, in Proc. ITA Workshop 2007
- http://www.servinghistory.com/topics/MIMO:sub::History_Of_MIMO

Index Terms

Computer Science

Wireless

Keywords
