

Detection of Secondary User in Cognitive Radio Environment Using Matched Filter Approach

Asif Raza

Department of Computer Science, Bahauddin Zakariya University, Multan, Pakistan

This paper addresses to the detection of secondary user radio signal by proposed approach “Matched Filter” in a cognitive radio environment to ensure interference- free use for the primary user. Secondary user also run in unused spectrum bands that are licensed without interfering with the licensed user by doing so minimizing spectrum shortage and expanding the potency of spectrum utilization. Spectrum sensing has been noticed as being an important functionality of cognitive radio. Performance of proposed approach of spectrum sensing of this technique is based on false alarm and detection probability and sensing time is low as compared to other detectors and needs less time to achieve high processing gain.

Biography

Asif Raza is working in the Department of Computer Science at Bahauddin Zakariya University, Multan , Pakistan.

asifraza.raza14@gmail.com