

عنوان مقاله:

Spectrum Sensing of Multiband Signals using Periodic Non-uniform Sampling

محل انتشار:

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تعداد صفحات اصل مقاله: 5

نویسنده:

خلاصه مقاله:

In this essay, we propose a Multiband Spectrum Sensing (MSS) approach that utilizes randomized sampling and its spectral analysis to accomplish the sensing task using considerably low sampling rates. Since the spectrum sensing procedure does not necessitate signal reconstructing, it is shown that the sampling rates can be arbitrarily low for some randomized sampling schemes. Most importantly, general guidelines are provided to ensure that the developed MSS satisfies certain detection probabilities set by the user. Spectrum sensing involves scanning predefined part(s) of the radio spectrum in search of meaningful activity such as an ongoing transmission or the occurrence of an event. Standard communications laboratory test equipment, e.g. spectrum analyzers, can perform similar functionality. They conventionally sweep the spectrum using a narrowband tunable bandpass filter(s) and determine the energy within each of the scanned spectral bands.

کلمات کلیدی:

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