Abstract

Low-Density Parity-Check (LDPC) codes are higher coding gains, the performance of LDPC code are closed to the Shannon limit, this make the decoding very attractive to many applications in digital communication systems, like DVB-S2 and WLAN802.11n, in this work the performance of LDPC code evaluated in different block lengths, code rates and number of iterations and implemented in MatLab simulation. In this work, a random signal is generated and encoded by multiplying the information by a matrix in the encoder, the resulting codeword modulated using BPSK modulation, codeword transmitted over an AWGN channel. This process implemented over different Eb/N0 values.

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**Index Terms**

Computer Science

Wireless

**Keywords**

LDPC Code, DVB-S2, WLAN802.11n