Abstract

In wireless, satellite, and space communication systems, reducing error is critical. High bit error rates of the wireless communication system require employing various coding methods on the data transferred. Channel coding for error detection and correction helps the communication system designers to reduce the effects of a noisy transmission channel. The purpose of this
paper is to study and investigate the performance of Reed-Solomon code that is used to encode the data stream in digital communication. The performances were evaluated by applying to binary phase shift keying modulation scheme in symmetric Additive White Gaussian Noise channel. Reed-Solomon codes are best for correcting burst errors and find wide range of applications in digital communications and data storage.

Reference


Index Terms

  Computer Science  Communications
### Key words

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<tr>
<th>Reed-Solomon codes (RS)</th>
<th>Forward Error Correction (FEC)</th>
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<td>Noise (AWGN)</td>
<td>Additive White Gaussian</td>
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