Abstract

Delta modulation is a waveform coding technique which reduces the data rate to a larger extent in data communication; the problem encountered in delta modulation is the slope over load error, which is inherent in the system. In order for the signal to have good fidelity, the slope-overload error needs to be as small as possible. Hence there is need for adaptive techniques to be applied to Delta Modulation to reduce the noise. Adaptive delta modulation reduces the slope over load error to a greater extent. ADM attempts to increase the dynamic range and the tracking capabilities of fixed step-size delta modulation. The adaptive algorithms adjust the step size (from a range of step sizes) to the power level of the signal and thus
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enhance the dynamic range of the coding system appreciably. This paper discusses several Adaptive Delta Modulation techniques for improving the signal-to-noise ratio (SNR) of Adaptive Delta Modulators (ADM) and also their performance comparison is made.

References

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Index Terms

Computer Science
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Keywords
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