Performance Of The Multilayer Perceptron-Based DFE With Latticestructure In Linear And Non-Linear Channels

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Summary

The effect of whitening the input data in a multilayer perceptron (MLP)-based decision feedback equalizer (DFE) is evaluated. It is shown that whitening the received data employing adaptive lattice channel equalization algorithms improves the convergence rate and bit error rate performances of MLP-based decision feedback equalizers. The consistency in performance is observed in time-invariant, time-varying and non-linear channels