

Convergence Behavior Of The Normalized Least Mean Fourth Algorithm

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Summary

The normalized least mean fourth (NLMF) algorithm. is presented in this work and shown to have potentially faster convergence. Unlike the LMF algorithm, the convergence behavior of the NLMF algorithm is independent of the input data correlation statistics. Sufficient conditions for the NLMF algorithm convergence in the mean are obtained and the analysis of the steady-state performance is carried out using the feedback approach. Simulation results confirm the performance of the NLMF algorithm.

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