Blind DFE With Maximum-Entropy Feedback

V. Krstić, M. Dukić

References:

Abstract:
This paper proposes an entropy-gradient adaptive feedback filter specially derived for the blind decision feedback equalizer with self-optimized configuration (SO-DFE). Using software simulations, the parametric complex-valued nonlinearity is aligned through two operation modes – blind acquisition and soft transition - to respond with a maximum entropy signal. As a result, the simple stochastic gradient algorithms are obtained the performances of which are superior in comparison with the corresponding LMS-type algorithms.

Keywords:
Blind Equalizer