Reservoir Computing: Size and Connectivity Optimization using the "Worm Algorithm"

Abstract

This work suggests an algorithm to find the optimum smallest value for Reservoir's Size (RS) and Connectivity Percent (CP) parameters in Reservoir Computing (RC) technique other than the gradient decent and evolutionary computation algorithms. This will help in reducing the required chip area and decreasing the number of multiplications before hardware implementation of RC.

References

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Index Terms

Computer Science

Algorithms

Keywords

Reservoir Computing optimization
Reservoir Size and Connectivity best values
selection
Worm Algorithm
Reservoir tuning