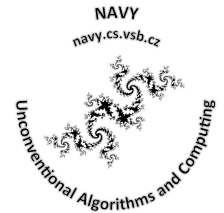




Unconventional computation and algorithms

Laboratory protocol



Topic: Artificial neural networks – simple neuron and transfer functions

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Name and student ID:

Date:

Note: *please remember that laboratory examples and studies are designed for students that regularly visit NAVY lectures. Laboratory staff is for you there to help you with programming and examples collection, but not for teaching of materials, that is done on lectures!!!*

Problem definition:

Create inside your framework for artificial neural networks (ANN) a

1. Subroutines that represent will be able to learn ANN by evolutionary algorithm.
2. Use EA on ANN to set weights for linearly separable problem.
3. Expand simple neuron by another one and use EA to learn ANN on XOR.
4. Create a program that learns ANN by fixed increments method.
5. Compare both methods.

Solution design:

Results and facts:

Conclusion:

