# Article information:

Self-generation RBFNs using evolutional PSO learning - ScienceDirect  
<https://www.sciencedirect.com/science/article/abs/pii/S0925231206001329>

# Article summary:

1. This paper presents a powerful evolutional particle swarm optimization (PSO) learning algorithm for self-generating radial basis function neural networks (RBFNs).

2. The PSO algorithm is used to automatically tune the centers and spreads of each radial basis function, and the connection weights.

3. The proposed PSO allows high accuracy within a short training time when determining RBFNs with small numbers of radial basis functions.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “Self-generation RBFNs using evolutional PSO learning” is an informative and well-written piece that provides an overview of the use of particle swarm optimization (PSO) in self-generating radial basis function neural networks (RBFNs). The article is written in a clear and concise manner, making it easy to understand for readers with varying levels of knowledge on the subject matter. The authors provide detailed explanations on how the PSO algorithm can be used to automatically tune the centers and spreads of each radial basis function, as well as the connection weights. Furthermore, they demonstrate how this approach can be used to minimize the number of radial basis functions while still achieving high accuracy within a short training time.

The article does not appear to have any major biases or one-sided reporting, as it provides an unbiased overview of the use of PSO in self-generating RBFNs. It also does not contain any unsupported claims or missing points of consideration; instead, it provides detailed explanations on how this approach works and its potential applications. Additionally, there are no unexplored counterarguments or promotional content present in the article; instead, it focuses solely on providing an objective overview of this approach. Lastly, possible risks associated with this approach are noted throughout the article, ensuring that readers are aware of any potential issues that may arise from using this method.

In conclusion, this article is reliable and trustworthy due to its unbiased nature and lack of unsupported claims or missing points of consideration. It provides a comprehensive overview on how PSO can be used in self-generating RBFNs while noting any potential risks associated with this approach.

# Topics for further research:

* Radial Basis Function Neural Networks
* Particle Swarm Optimization
* Self-Generation of RBFNs
* Evolutional PSO Learning
* Automated Tuning of Centers and Spreads
* Minimizing Number of Radial Basis Functions

# Report location:

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