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Next Generatiion Evolutionary Computational Techniques Based on Swarm Intelligence Principles

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Abstract:

After many years of intensive research and development, the evolutionary computing is becoming an everyday tool for solving complex optimization problems. Many such methods take inspiration in swarm intelligence exhibited by various animal species. With the complexity of solved problems ever increasing a new generation of evolutionary computing is needed.

The goal of the work is to use the current successful examples of swarm intelligence based evolutionary computational techniques as a base for development of new effective and robust methods for solving complex optimization challenges of the future.

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