

Sperm swarm optimization algorithm for optimizing wireless sensor network challenges

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This paper proposes a new meta-heuristic optimization approach, called "Sperm Swarm Optimization (SSO)". The underlying ideas and concepts behind the proposed method are inspired by sperm motility to fertilize the egg. In SSO, sperm swarm moves forward from a low-temperature zone called Cervix. During this direction, sperm searches for a high-temperature zone called Fallopian Tubes where the egg is waiting for the swarm for fertilization in this zone, which this area is considered as the optimal solution. The SSO is tested with optimizing several objective functions that represent Wireless Sensor Network (WSN) quality of services, which is used to minimize both the end-to-end delay and end-to-end latency and also to maximize both the packet throughput and energy efficiency.

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