Abstract

Using Spider monkey optimization (SMO) has become a common heuristic technique in many fields of engineering. In this paper, we apply SMO to solve near far effect problems in code division multiple access (CDMA) system, to reduce the computational complexity. The new approach is successfully tested in CDMA multiuser situation. The simulation results show that proposed algorithm is effective and outperforms as compare to methods like Particle Swarm Optimization (PSO) and Genetic Algorithm (GA).

References

2. Cong Wang, “A Complete Binary and Hardware- Efficient PSO for CDMA Multiuser Detection,” Sixth International Conference on Intelligent Human-Machine Systems and
Cybernetics, pp. 3-6, 2014.

Index Terms

Computer Science

Networks

Keywords

Spider Monkey Optimization; Particle Swarm Optimization; Genetic Algorithm; DS-CDMA multiuser detection.